
	Test report n.	322-QL11-R96 ver. 0	 <small>LAB N°1235</small> <small>Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC</small> <small>Signatory of EA, IAF and ILAC Mutual Recognition Agreements</small>
	Applicant	METALSPOT SpA via T. Tasso, 44 20089 Rozzano (MI) Italy	
	EUT/Type	L55030-01 PLANA 3000K	

## TEST REPORT Nr. 322-QL11-R96 ver. 0



GENERAL INFORMATION INFORMAZIONI GENERALI	
Addresses Indirizzi	
Applicant Richiedente	METALSPOT SpA via T. Tasso, 44 20089 Rozzano (MI) Italy
Manufacturer Produttore	Same as applicant Come il richiedente
Test laboratory Laboratorio di prova	Qualilab s.r.l. Via Trento, 87 25020 – Capriano del Colle (BS)
Test instrument Strumento di misura	Mirror photogoniometer LMT GO-DS 2000 ref. N° QL-IN-001 Power supply CHROMA 6415 ref. N° QL-IN-010 Powermeter YOKOGAWA WT2010 ref.N° QL-IN-006 Temperature sensor TESTO 174T ref.N° QL-IN-022 Temperature sensor TESTO 174T ref.N° QL-IN-023
Dates Date	
Report Date Data preparazione rapporto di prova	Ver. 0 10/01/2012
Equipment under test Dispositivo sottoposto a prova	
Equipment under test Dispositivo sottoposto a prova	Luminaire / Apparecchio di illuminazione
Type: Modello:	L55030-01 PLANA 3000K
Test sample n°: N° identificativo campione:	322-QL11-S96
Light source: Sorgente luminosa:	16 LED 3000K
Power supply: Alimentazione :	230 V, 50Hz
Note: Note :	-

The test results and observations indicated in this test report refer exclusively to the samples tested. It is not permitted to transfer the results to other systems or configurations.

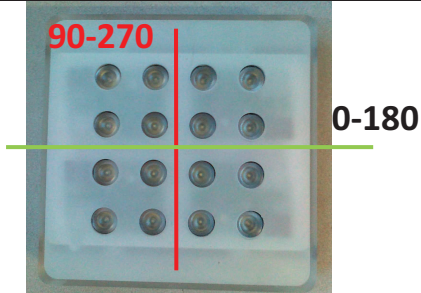
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I risultati e le osservazioni indicate in questo rapporto di prova sono riferite esclusivamente ai campioni testati. Non è permesso utilizzare i risultati e le osservazioni di questo rapporto di prova per altri sistemi o configurazioni.

Non è permessa la pubblicazione o la duplicazione completa o parziale di questo rapporto di prova e dei suoi allegati senza un consenso scritto da parte del laboratorio di prova. Il laboratorio di prova non si assume responsabilità nei confronti di terzi per danni o eventuali costi derivanti dall'utilizzo dei dati presenti in questo rapporto di prova. Ogni uso del nome del laboratorio di prova e dei suoi marchi per la vendita o per pubblicizzare il prodotto testato deve essere prima approvato in forma scritta dal laboratorio di prova.

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	Applicant	METALSPOT SpA via T. Tasso, 44 20089 Rozzano (MI) Italy	
	EUT/Type	L55030-01 PLANA 3000K	

Date of receipt: Data ricevimento :	n.a.
Date and method of sampling: Data e metodo di campionamento:	Sampled by the applicant Campionato dal richiedente
Test ambient temperature: Temperatura ambiente durante la prova :	(20,0-27)±3,0°C. Temperature registrations during photometric tests are stored in the laboratory and available on request. Le registrazioni delle temperature durante le prove sono disponibili su richiesta

Axis position/Posizione degli assi	
	

TEST AND RESULTS/PROVE E RISULTATI	
Test Name/ Identificazione prova	Result/Esito
Luminous flux light source/ Flusso luminoso sorgente	-
Luminous flux luminaire Flusso luminoso apparecchio di illuminazione	1219,29 ± 41 lm
EN13032-01: 2005 Light and lighting - Measurement and presentation of photometric data of lamps and luminaires - Part 1: Measurement and file format EN13032-01: 2005 Luce e illuminazione - Misurazione e presentazione dei dati fotometrici di lampade e apparecchi di illuminazione - Parte 1: Misurazione e formato di file	See annex "photometric results" Vedi appendice "photometric results"

STATEMENT
<p>The Test Report comprises 2 pages. The annex "photometric result" comprises 10 pages  The English version is the only official version of this test report</p> <p>The measured value (y) and the associated expanded uncertainty (U) represent the interval (y±U) which contains the value of the measured quantity with a probability of approximately 95 % and a coverage factor k = 2.</p> <p>Questo rapporto di prova contiene 2 pagine. L'annesso "photometric results" contiene 10 pagine  La versione inglese di questo rapporto di prova è l'unica versione ufficiale che fa fede.</p> <p>Il valore misurato (y) e l'incertezza espansa associata (U) rappresentano l'intervallo (y±U) che contiene il valore della quantità misurata con una probabilità di circa il 95% e un fattore di copertura K=2.</p>

Capriano del Colle, 10/01/2012




Ing. Michele Peschiera  
Testing engineer

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<b>QUALILAB s.r.l.</b> Via Trento, 87, 25020 - Capriano Del Colle (BS), <a href="mailto:info@qualilab.it">info@qualilab.it</a> , <a href="http://www.qualilab.it">www.qualilab.it</a>

## PHOTOMETRIC RESULTS

<b>File Name:</b>	Metalspot 322-QL11-S96 L55030-01 Plana 3000K
<b>Sample Number:</b>	322-QL11-S96
<b>Report Number:</b>	322-QL11-R96
<b>Model:</b>	Plana 3000K
<b>Flux:</b>	1219.29 lm
<b>Date:</b>	1/10/2012 2:44:06 PM
<b>Manufacturer:</b>	Metalspot

## Protocol

**LiTG-class:** A60  
**UTE-class:** 1.00 A  
**IES-class:** 96 - 99 - 100 - 100 - 100  
**TM5-class:** BZ1

### Divergences in the plane through maximum intensity:

	Horizontal	Vertical
One half peak divergence	46.0°	45.2°
Half peak side angle (left)	-22.6°	-22.8°
Half peak side angle (right)	23.4°	22.4°
One tenth peak divergence	68.3°	68.0°
Tenth peak side angle (left)	-33.8°	-34.1°
Tenth peak side angle (right)	34.5°	33.9°

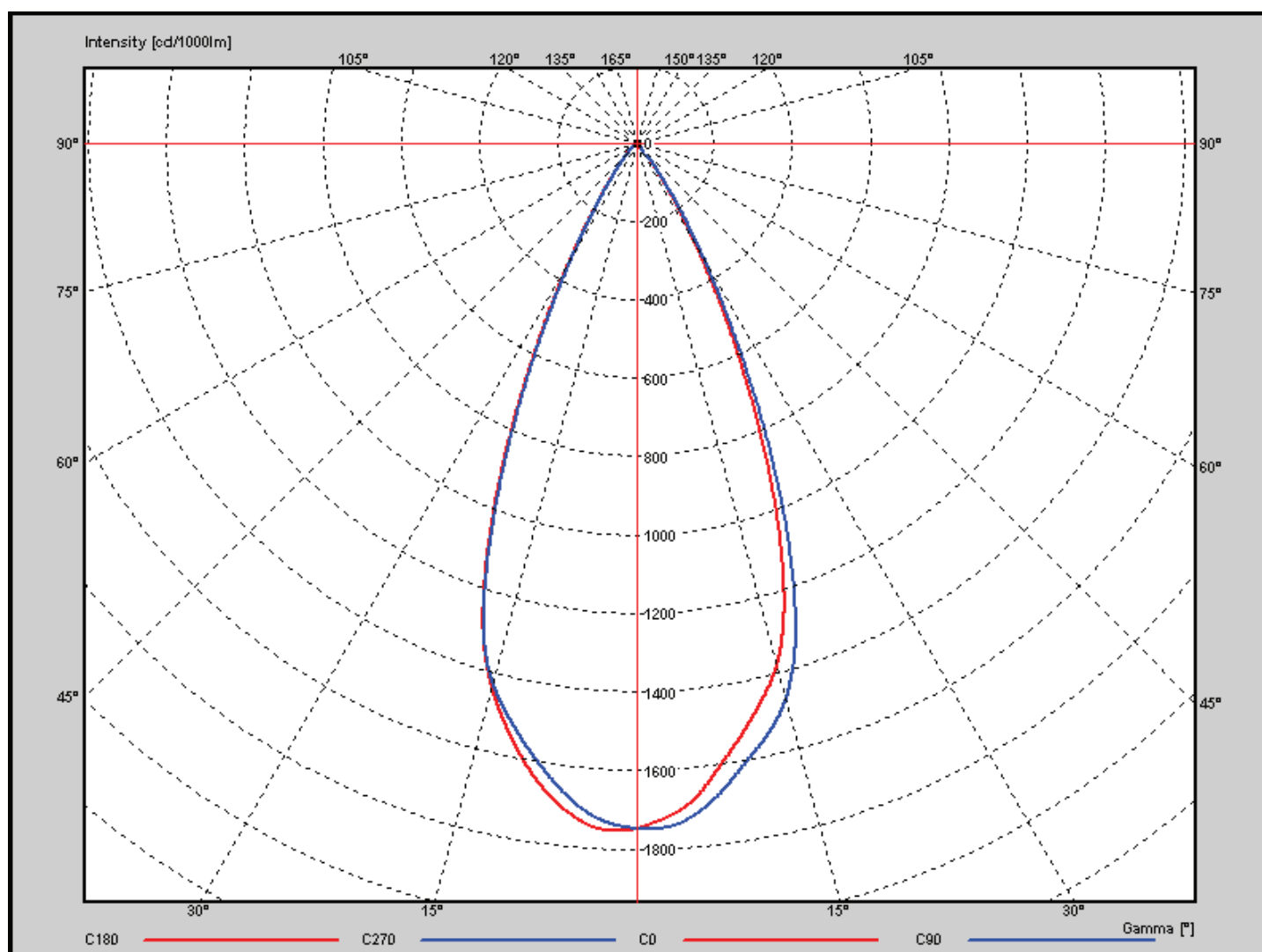
<b>C-planes:</b>	0.0°	5.0°	10.0°	15.0°	20.0°	25.0°	30.0°	35.0°	40.0°	45.0°
	50.0°	55.0°	60.0°	65.0°	70.0°	75.0°	80.0°	85.0°	90.0°	95.0°
	100.0°	105.0°	110.0°	115.0°	120.0°	125.0°	130.0°	135.0°	140.0°	145.0°
	150.0°	155.0°	160.0°	165.0°	170.0°	175.0°	180.0°	185.0°	190.0°	195.0°
	200.0°	205.0°	210.0°	215.0°	220.0°	225.0°	230.0°	235.0°	240.0°	245.0°
	250.0°	255.0°	260.0°	265.0°	270.0°	275.0°	280.0°	285.0°	290.0°	295.0°
	300.0°	305.0°	310.0°	315.0°	320.0°	325.0°	330.0°	335.0°	340.0°	345.0°
	350.0°	355.0°								

<b>Gamma:</b>	0.0°	2.5°	5.0°	7.5°	10.0°	12.5°	15.0°	17.5°	20.0°	22.5°
	25.0°	27.5°	30.0°	32.5°	35.0°	37.5°	40.0°	42.5°	45.0°	47.5°
	50.0°	60.0°	70.0°	80.0°	90.0°					

## PHOTOMETRIC RESULTS

<b>File Name:</b>	Metalspot 322-QL11-S96 L55030-01 Plana 3000K
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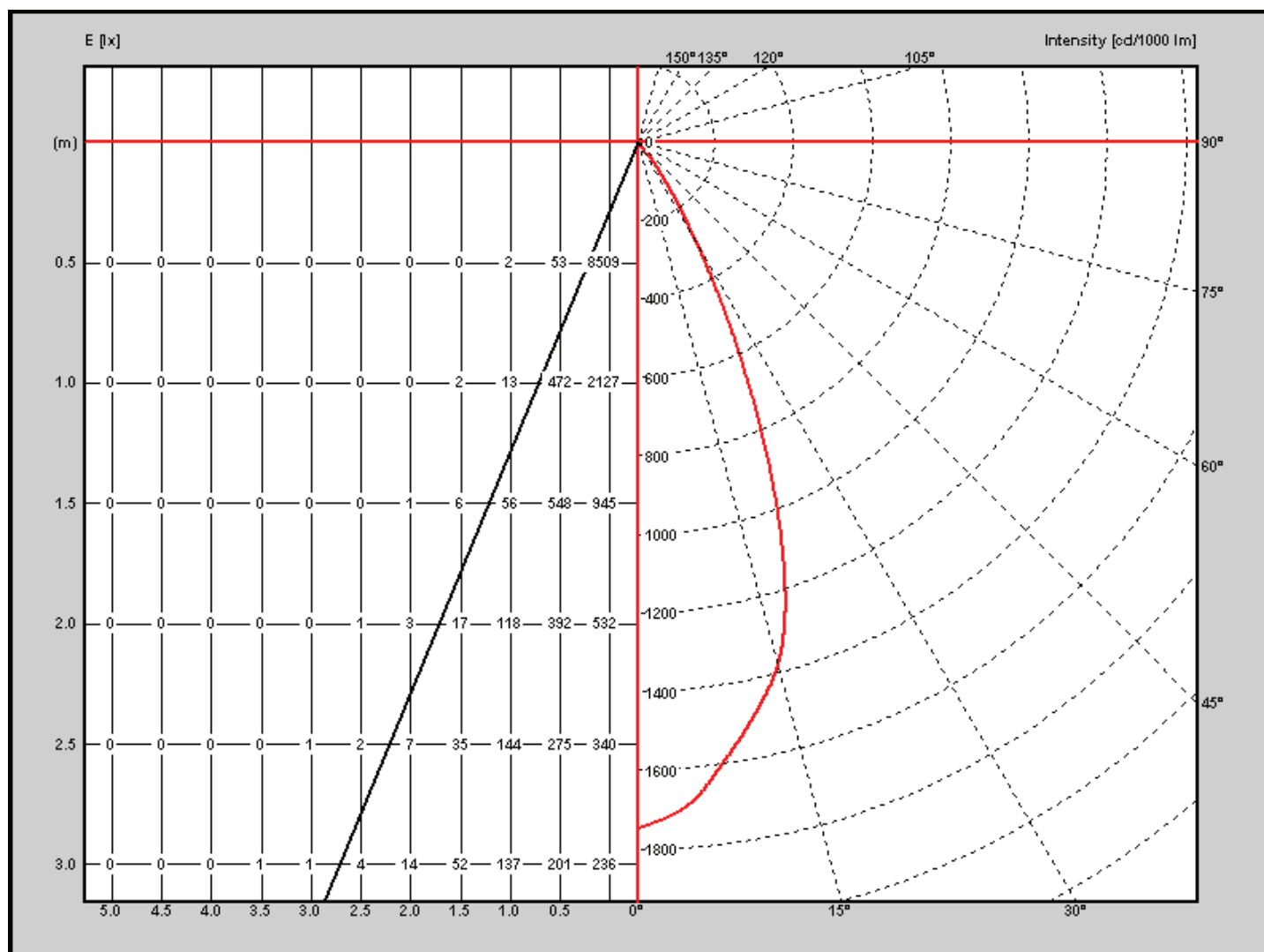
Polar diagram Metalspot 322-QL11-S96 L55030-01 Plana 3000K / C0 to C357.5 in 2.5 - Gamma 0 to 90



## PHOTOMETRIC RESULTS

<b>File Name:</b>	Metalspot 322-QL11-S96 L55030-01 Plana 3000K
<b>Sample Number:</b>	322-QL11-S96
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Illuminance and Intensity diagram Metalspot 322-QL11-S96 L55030-01 Plana 3000K / C0 to C357.5 in 2.5 - Gamma 0 to 90



## PHOTOMETRIC RESULTS

<b>File Name:</b>	Metalspot 322-QL11-S96 L55030-01 Plana 3000K
<b>Sample Number:</b>	322-QL11-S96
<b>Report Number:</b>	322-QL11-R96
<b>Model:</b>	Plana 3000K
<b>Flux:</b>	1219.29 lm
<b>Date:</b>	1/10/2012 2:44:06 PM
<b>Manufacturer:</b>	Metalspot

Zonal flux Metalspot 322-QL11-S96 L55030-01 Plana 3000K / C0 to C357.5 in 2.5 - Gamma 0 to 90

Gamm a [°]	Imin [cd/klm]	Imax [cd/klm]	Imean [cd/klm]	Zonal flux [lm]	Sum. zonal flux [lm]	Rel. zonal flux [%]	Sum. rel. zonal flux [%]
0.0	1744.6	1744.6	1744.6	0.00	0.00	0.00	0.00
2.5	1717.5	1754.9	1734.8	12.69	12.69	1.04	1.04
5.0	1669.8	1736.4	1701.7	37.56	50.25	3.08	4.12
7.5	1602.6	1693.0	1646.7	60.92	111.17	5.00	9.12
10.0	1530.4	1621.0	1577.8	81.98	193.15	6.72	15.84
12.5	1457.7	1546.1	1506.3	100.55	293.70	8.25	24.09
15.0	1377.2	1465.4	1421.6	116.30	410.01	9.54	33.63
17.5	1252.0	1346.0	1295.7	127.08	537.08	10.42	44.05
20.0	1064.9	1165.6	1111.3	129.30	666.38	10.60	54.65
22.5	856.0	951.7	897.0	121.65	788.03	9.98	64.63
25.0	641.0	725.5	678.3	106.03	894.06	8.70	73.33
27.5	457.4	522.4	486.6	86.11	980.17	7.06	80.39
30.0	313.6	360.8	334.2	65.99	1046.16	5.41	85.80
32.5	208.8	240.1	222.2	48.24	1094.40	3.96	89.76
35.0	137.4	156.8	145.9	34.18	1128.58	2.80	92.56
37.5	91.5	103.9	96.7	23.98	1152.56	1.97	94.53
40.0	62.0	70.4	65.4	16.96	1169.51	1.39	95.92
42.5	43.0	48.4	45.2	12.19	1181.70	1.00	96.92
45.0	30.2	33.7	31.6	8.87	1190.57	0.73	97.64
47.5	21.0	24.0	22.4	6.52	1197.09	0.53	98.18
50.0	14.0	17.2	15.6	4.78	1201.86	0.39	98.57
60.0	4.1	4.4	4.2	10.84	1212.70	0.89	99.46
70.0	2.0	2.2	2.1	3.81	1216.51	0.31	99.77
80.0	0.8	1.0	0.9	1.93	1218.44	0.16	99.93
90.0	0.2	0.4	0.4	0.85	1219.29	0.07	100.00

## PHOTOMETRIC RESULTS

<b>File Name:</b>	Metalspot 322-QL11-S96 L55030-01 Plana 3000K
<b>Sample Number:</b>	322-QL11-S96
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<b>Model:</b>	Plana 3000K
<b>Flux:</b>	1219.29 lm
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<b>Manufacturer:</b>	Metalspot

Electrical protocol Metalspot 322-QL11-S96 L55030-01 Plana 3000K / C0 to C357.5 in 2.5 - Gamma 0 to 90

[deg]	U [V]	I [A]	P [W]	PF
0.0	230.350	0.244	28.0	0.497
2.5	230.310	0.244	27.9	0.497
5.0	230.360	0.243	27.9	0.499
7.5	230.440	0.244	27.9	0.497
10.0	230.410	0.243	28.1	0.502
12.5	230.420	0.243	27.9	0.499
15.0	230.370	0.243	28.0	0.501
17.5	230.380	0.243	28.0	0.500
20.0	230.380	0.245	27.9	0.494
22.5	230.420	0.243	27.9	0.497
25.0	230.400	0.243	28.0	0.500
27.5	230.340	0.245	27.9	0.496
30.0	230.420	0.243	27.8	0.496
32.5	230.360	0.244	27.9	0.496
35.0	230.400	0.243	27.9	0.499
37.5	230.340	0.244	27.9	0.496
40.0	230.340	0.242	27.9	0.500
42.5	230.330	0.243	27.9	0.499
45.0	230.340	0.243	27.9	0.498
47.5	230.400	0.244	28.0	0.498
50.0	230.440	0.240	28.0	0.506
60.0	230.400	0.244	28.0	0.498
70.0	230.340	0.241	27.9	0.502
80.0	230.350	0.245	28.0	0.497
90.0	230.350	0.244	27.8	0.495

## PHOTOMETRIC RESULTS

<b>File Name:</b>	Metalspot 322-QL11-S96 L55030-01 Plana 3000K
<b>Sample Number:</b>	322-QL11-S96
<b>Report Number:</b>	322-QL11-R96
<b>Model:</b>	Plana 3000K
<b>Flux:</b>	1219.29 lm
<b>Date:</b>	1/10/2012 2:44:06 PM
<b>Manufacturer:</b>	Metalspot

Intensity [cd/klm] Metalspot 322-QL11-S96 L55030-01 Plana 3000K / C0 to C357.5 in 2.5 - Gamma 0 to 90

G/C [cd/klm]	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0
0.0	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6
2.5	1717.5	1717.6	1717.8	1722.0	1720.0	1721.9	1723.9	1730.1
5.0	1675.7	1669.8	1672.5	1678.7	1676.9	1676.5	1682.5	1682.5
7.5	1602.6	1603.2	1608.5	1612.8	1613.3	1614.6	1620.5	1624.6
10.0	1531.5	1530.4	1536.3	1538.7	1541.4	1544.4	1548.0	1550.1
12.5	1457.8	1457.7	1465.2	1466.1	1468.8	1471.7	1479.5	1481.0
15.0	1377.7	1377.2	1385.8	1388.7	1391.8	1395.7	1398.8	1404.2
17.5	1252.0	1257.0	1267.4	1269.2	1273.4	1279.1	1283.9	1286.6
20.0	1071.6	1076.3	1086.8	1089.6	1094.4	1103.6	1106.2	1112.0
22.5	865.0	868.4	879.9	881.6	888.7	896.1	899.8	903.8
25.0	656.5	660.2	667.7	669.8	674.7	679.1	682.5	684.2
27.5	472.8	476.0	481.5	481.2	483.8	487.1	489.4	490.5
30.0	324.5	327.5	331.8	331.2	332.9	334.1	335.5	336.7
32.5	215.6	218.3	220.5	220.4	221.5	222.8	223.9	224.8
35.0	142.0	143.2	144.8	144.8	145.8	147.1	147.9	148.4
37.5	93.9	94.4	95.4	95.4	96.5	97.8	98.3	98.6
40.0	63.5	64.1	64.8	64.7	65.3	66.0	66.4	66.4
42.5	44.0	44.4	44.8	44.7	45.0	45.3	45.7	45.8
45.0	30.9	31.1	31.3	31.3	31.5	31.8	32.1	32.1
47.5	21.9	22.2	22.4	22.3	22.4	22.6	22.9	23.0
50.0	14.9	15.1	15.2	15.3	15.5	15.8	16.0	16.2
60.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2
70.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
80.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9
90.0	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4

G/C [cd/klm]	40.0	45.0	50.0	55.0	60.0	65.0	70.0	75.0
0.0	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6
2.5	1726.0	1726.1	1730.2	1728.2	1726.2	1730.3	1728.2	1730.2
5.0	1682.6	1687.0	1690.9	1691.1	1691.5	1693.4	1693.1	1699.3
7.5	1624.7	1629.3	1635.2	1639.6	1638.4	1640.2	1643.7	1647.8
10.0	1554.5	1559.3	1567.1	1569.5	1573.0	1580.8	1579.8	1584.0
12.5	1485.6	1493.1	1500.2	1504.3	1506.8	1515.7	1514.1	1520.1
15.0	1406.9	1415.9	1420.3	1427.2	1429.2	1436.0	1440.6	1447.4
17.5	1291.5	1297.2	1302.8	1307.1	1308.1	1317.1	1319.1	1328.3
20.0	1113.3	1121.8	1123.8	1125.5	1127.1	1136.9	1138.9	1149.1
22.5	904.6	907.7	908.4	909.4	913.4	924.1	927.3	935.6
25.0	685.9	689.0	688.6	690.0	692.3	701.3	704.2	713.1
27.5	490.9	495.2	494.9	495.2	496.8	503.1	507.3	514.1
30.0	338.0	340.1	340.9	340.3	341.6	346.5	348.5	354.1
32.5	225.9	227.2	227.5	227.2	227.4	230.2	231.7	235.2



Intensity [cd/klm] Metalspot 322-QL11-S96 L55030-01 Plana 3000K / C0 to C357.5 in 2.5 - Gamma 0 to 90

G/C [cd/klm]	40.0	45.0	50.0	55.0	60.0	65.0	70.0	75.0
35.0	148.6	149.4	149.7	149.4	149.4	151.5	151.9	153.5
37.5	98.4	98.8	98.9	98.9	99.2	100.3	100.4	101.4
40.0	66.3	66.5	66.8	66.9	67.3	68.0	68.1	68.6
42.5	45.7	45.9	46.0	46.0	46.3	46.9	47.0	47.2
45.0	32.2	32.2	32.2	32.2	32.6	32.9	32.9	33.1
47.5	23.0	23.0	23.1	23.1	23.1	23.4	23.4	23.7
50.0	16.3	16.3	16.4	16.5	16.5	16.8	16.8	17.0
60.0	4.2	4.2	4.2	4.2	4.2	4.3	4.3	4.3
70.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
80.0	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8
90.0	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3

G/C [cd/klm]	80.0	85.0	90.0	95.0	100.0	105.0	110.0	115.0
0.0	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6
2.5	1730.3	1738.5	1742.6	1742.6	1744.6	1744.6	1746.7	1748.8
5.0	1699.7	1709.8	1714.0	1714.0	1718.0	1720.0	1724.0	1728.1
7.5	1646.6	1656.6	1662.8	1662.9	1664.7	1670.7	1672.5	1678.6
10.0	1583.2	1595.1	1599.4	1599.6	1605.2	1604.9	1608.7	1612.5
12.5	1520.9	1534.5	1541.7	1537.5	1542.1	1540.2	1541.5	1544.6
15.0	1444.3	1456.1	1465.4	1458.6	1462.7	1465.0	1463.5	1462.4
17.5	1330.7	1338.6	1346.0	1340.3	1340.8	1343.1	1339.7	1335.2
20.0	1150.8	1156.1	1165.6	1161.2	1158.5	1157.1	1158.8	1155.2
22.5	937.7	943.0	951.7	945.0	942.8	942.4	939.5	940.7
25.0	714.0	718.1	725.5	720.9	719.2	720.0	716.8	717.1
27.5	515.4	517.7	522.4	521.6	520.7	522.4	519.1	516.8
30.0	355.5	356.3	360.8	359.1	359.4	359.0	357.8	355.9
32.5	235.7	236.9	240.1	239.2	238.2	238.2	237.5	236.8
35.0	153.8	154.6	156.8	156.7	156.3	156.3	156.0	156.3
37.5	101.5	102.1	103.5	103.5	103.6	103.4	103.4	103.9
40.0	68.6	68.8	70.1	69.9	70.0	70.2	70.1	70.4
42.5	47.2	47.5	48.1	48.1	48.3	48.4	48.4	48.4
45.0	33.1	33.1	33.5	33.4	33.6	33.6	33.7	33.7
47.5	23.6	23.6	23.9	23.9	24.0	23.9	24.0	23.9
50.0	17.0	16.9	17.1	17.1	17.2	17.2	17.2	17.2
60.0	4.3	4.3	4.3	4.4	4.4	4.4	4.4	4.4
70.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
80.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
90.0	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3

G/C [cd/klm]	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0
0.0	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6
2.5	1754.9	1748.7	1750.8	1750.8	1750.8	1748.7	1748.7	1750.8
5.0	1726.1	1730.3	1730.3	1730.1	1734.3	1730.3	1732.3	1736.4
7.5	1684.8	1683.1	1687.3	1688.7	1693.0	1689.3	1685.1	1684.9
10.0	1612.6	1615.5	1617.7	1618.2	1616.5	1619.6	1619.4	1621.0
12.5	1543.6	1542.7	1545.0	1546.1	1545.4	1543.9	1542.3	1541.1
15.0	1458.8	1452.1	1451.2	1451.0	1455.4	1451.5	1452.6	1450.9
17.5	1328.1	1325.6	1326.5	1321.7	1326.2	1327.6	1325.3	1322.6
20.0	1150.1	1147.0	1146.7	1140.4	1141.9	1140.9	1138.9	1137.0
22.5	938.9	935.0	930.9	927.8	927.7	923.6	919.9	917.6
25.0	713.9	710.6	708.1	702.6	700.7	700.1	697.4	695.4
27.5	513.1	510.3	507.2	503.9	503.3	503.9	503.3	500.9
30.0	353.9	350.6	348.7	346.6	346.2	347.5	346.9	346.7
32.5	236.1	234.5	232.8	231.0	230.5	231.0	230.9	231.1

Intensity [cd/klm] Metalspot 322-QL11-S96 L55030-01 Plana 3000K / C0 to C357.5 in 2.5 - Gamma 0 to 90

G/C [cd/klm]	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0
35.0	156.0	154.9	153.3	152.2	151.8	152.2	151.8	152.3
37.5	103.8	103.0	102.0	101.0	100.6	100.8	100.2	100.4
40.0	70.3	69.7	69.1	68.7	68.3	68.3	68.0	67.7
42.5	48.4	48.1	47.7	47.4	47.1	47.1	46.9	46.7
45.0	33.7	33.5	33.3	33.0	32.9	32.9	32.7	32.6
47.5	23.9	23.8	23.6	23.5	23.5	23.4	23.3	23.3
50.0	17.2	17.1	17.0	16.9	16.9	16.8	16.8	16.7
60.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
70.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.1
80.0	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9
90.0	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4

G/C [cd/klm]	160.0	165.0	170.0	175.0	180.0	185.0	190.0	195.0
0.0	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6
2.5	1752.9	1752.9	1748.7	1746.7	1750.8	1746.7	1746.7	1746.7
5.0	1726.1	1732.3	1728.3	1726.3	1726.2	1720.1	1726.2	1722.1
7.5	1684.8	1682.8	1677.1	1677.3	1677.1	1671.1	1673.0	1670.8
10.0	1614.7	1618.8	1607.6	1610.0	1609.5	1601.6	1605.4	1605.2
12.5	1538.2	1539.2	1534.4	1527.5	1525.5	1523.0	1526.8	1528.3
15.0	1450.4	1450.6	1441.7	1434.7	1429.1	1431.9	1432.6	1433.0
17.5	1321.9	1321.7	1312.1	1306.9	1299.1	1296.6	1300.5	1299.1
20.0	1134.0	1134.0	1124.7	1118.8	1113.5	1114.6	1114.6	1114.6
22.5	918.7	918.7	912.0	905.4	899.5	901.3	901.6	900.0
25.0	695.8	697.4	693.4	688.3	684.3	684.0	682.9	679.2
27.5	501.7	502.6	499.9	497.1	493.3	494.0	491.4	487.1
30.0	346.2	347.9	344.6	342.0	338.7	338.5	337.5	334.0
32.5	231.0	230.8	228.9	226.7	224.8	224.7	223.8	222.2
35.0	151.5	151.3	149.7	148.4	147.4	147.4	146.8	145.8
37.5	99.9	99.5	98.8	97.9	97.4	97.6	97.6	96.7
40.0	67.3	67.3	66.7	66.2	65.8	65.8	65.7	65.3
42.5	46.6	46.4	45.9	45.5	45.3	45.2	45.1	44.8
45.0	32.5	32.5	32.2	31.8	31.6	31.6	31.5	31.2
47.5	23.1	23.1	22.9	22.7	22.5	22.5	22.5	22.3
50.0	16.6	16.6	16.4	16.3	16.2	16.1	15.9	15.7
60.0	4.3	4.3	4.3	4.3	4.3	4.2	4.2	4.2
70.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1
80.0	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0
90.0	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4

G/C [cd/klm]	200.0	205.0	210.0	215.0	220.0	225.0	230.0	235.0
0.0	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6
2.5	1746.7	1744.6	1742.6	1742.6	1738.5	1740.5	1738.5	1738.5
5.0	1722.0	1715.8	1715.7	1715.6	1711.7	1711.7	1707.6	1707.6
7.5	1670.7	1670.5	1664.1	1665.8	1660.3	1658.2	1654.1	1652.2
10.0	1606.9	1600.4	1600.1	1597.3	1592.4	1590.3	1588.3	1588.5
12.5	1527.0	1521.6	1519.4	1516.6	1514.6	1517.3	1512.6	1511.8
15.0	1432.5	1423.9	1424.6	1420.6	1417.1	1418.7	1416.7	1420.0
17.5	1298.3	1288.4	1287.5	1284.7	1282.8	1287.3	1281.7	1284.9
20.0	1113.2	1104.5	1101.7	1097.2	1095.5	1095.3	1093.3	1094.5
22.5	900.1	892.5	889.5	884.1	882.8	879.5	874.8	875.6
25.0	678.5	674.0	672.7	666.5	663.3	661.4	657.7	656.1
27.5	485.0	480.8	476.7	472.8	470.1	470.5	468.0	467.5
30.0	332.9	328.5	326.4	323.4	322.2	321.4	318.5	318.5
32.5	221.3	218.5	217.6	215.7	214.2	213.6	212.3	211.0

Intensity [cd/klm] Metalspot 322-QL11-S96 L55030-01 Plana 3000K / C0 to C357.5 in 2.5 - Gamma 0 to 90

G/C [cd/klm]	200.0	205.0	210.0	215.0	220.0	225.0	230.0	235.0
35.0	145.7	144.3	143.5	142.1	141.0	140.4	139.3	138.4
37.5	96.7	95.7	95.2	94.0	93.4	93.0	92.3	91.8
40.0	65.2	64.4	64.0	63.3	63.0	62.7	62.3	62.3
42.5	44.8	44.3	44.1	43.6	43.4	43.4	43.1	43.1
45.0	31.2	31.0	30.8	30.5	30.4	30.4	30.2	30.4
47.5	22.3	22.1	22.0	21.8	21.7	21.7	21.5	21.5
50.0	15.6	15.5	15.4	15.2	15.1	15.0	14.8	14.7
60.0	4.2	4.2	4.2	4.2	4.2	4.1	4.1	4.1
70.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
80.0	0.9	0.9	0.9	1.0	0.9	0.9	0.9	0.9
90.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

G/C [cd/klm]	240.0	245.0	250.0	255.0	260.0	265.0	270.0	275.0
0.0	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6
2.5	1736.4	1734.3	1736.4	1732.2	1738.4	1730.2	1730.2	1730.2
5.0	1707.5	1703.4	1699.4	1697.1	1697.0	1690.9	1693.3	1693.1
7.5	1655.9	1654.0	1650.1	1639.3	1641.0	1635.1	1635.7	1633.3
10.0	1587.7	1579.8	1578.2	1571.2	1574.7	1568.9	1570.0	1561.1
12.5	1511.3	1507.8	1512.0	1501.8	1504.1	1496.8	1498.7	1493.2
15.0	1419.9	1422.3	1422.8	1417.4	1420.8	1416.0	1419.3	1414.9
17.5	1286.7	1285.3	1290.7	1287.9	1295.8	1291.9	1295.2	1289.9
20.0	1094.5	1096.6	1101.6	1100.0	1106.9	1097.2	1100.6	1096.9
22.5	873.8	877.1	879.7	876.9	883.7	879.5	880.3	877.3
25.0	656.6	657.7	658.6	657.6	663.2	659.8	662.3	659.1
27.5	469.1	469.4	471.2	469.9	474.1	471.5	473.0	470.4
30.0	319.4	321.1	323.4	322.3	324.5	322.5	323.0	320.9
32.5	211.4	213.0	213.9	213.3	214.0	212.7	213.5	212.2
35.0	138.4	139.6	139.7	138.9	139.6	138.5	139.6	139.8
37.5	92.0	92.2	92.3	91.9	92.2	91.9	92.7	92.8
40.0	62.4	62.5	62.4	62.1	62.5	62.4	62.8	62.8
42.5	43.3	43.4	43.2	43.0	43.2	43.1	43.4	43.3
45.0	30.3	30.3	30.4	30.2	30.4	30.2	30.4	30.4
47.5	21.5	21.4	21.3	21.3	21.3	21.2	21.3	21.3
50.0	14.7	14.6	14.5	14.4	14.4	14.3	14.3	14.3
60.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
70.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
80.0	0.9	0.9	1.0	0.9	1.0	1.0	1.0	1.0
90.0	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3

G/C [cd/klm]	280.0	285.0	290.0	295.0	300.0	305.0	310.0	315.0
0.0	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6
2.5	1732.2	1726.0	1726.0	1724.0	1724.1	1726.0	1726.0	1724.1
5.0	1690.6	1690.8	1686.8	1684.8	1685.0	1682.7	1682.6	1682.9
7.5	1630.4	1628.7	1629.0	1624.9	1625.4	1624.9	1618.5	1617.1
10.0	1561.9	1558.4	1556.7	1556.7	1551.5	1550.6	1546.2	1547.1
12.5	1490.0	1489.2	1487.2	1485.5	1477.5	1475.2	1472.4	1472.4
15.0	1408.4	1407.7	1399.8	1403.8	1396.3	1392.8	1384.1	1385.8
17.5	1285.2	1281.9	1277.2	1276.2	1267.9	1264.2	1258.7	1258.3
20.0	1091.0	1088.4	1082.9	1083.9	1078.4	1073.8	1069.7	1070.6
22.5	871.3	871.5	864.5	867.8	864.7	859.5	857.0	858.7
25.0	654.0	653.6	651.2	652.2	648.9	644.0	641.0	644.4
27.5	467.9	466.5	465.4	466.6	461.9	459.4	457.4	460.0
30.0	318.2	317.5	316.5	318.6	316.7	314.7	313.6	315.4
32.5	210.2	210.3	209.4	210.8	210.6	210.0	208.8	209.6

Intensity [cd/klm] Metalspot 322-QL11-S96 L55030-01 Plana 3000K / C0 to C357.5 in 2.5 - Gamma 0 to 90

G/C [cd/klm]	280.0	285.0	290.0	295.0	300.0	305.0	310.0	315.0
35.0	138.7	138.0	137.4	138.6	138.9	138.2	137.4	137.7
37.5	91.8	91.9	91.6	92.3	92.5	92.0	91.5	91.7
40.0	62.3	62.4	62.3	62.8	62.7	62.5	62.0	62.3
42.5	43.3	43.3	43.2	43.5	43.4	43.2	43.1	43.3
45.0	30.2	30.3	30.3	30.5	30.3	30.2	30.2	30.3
47.5	21.1	21.1	21.1	21.2	21.1	21.0	21.0	21.1
50.0	14.2	14.2	14.1	14.2	14.1	14.0	14.0	14.1
60.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
70.0	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1
80.0	1.0	1.0	0.9	0.9	0.9	0.9	1.0	0.9
90.0	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4

G/C [cd/klm]	320.0	325.0	330.0	335.0	340.0	345.0	350.0	355.0
0.0	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6	1744.6
2.5	1724.1	1721.9	1720.0	1720.0	1722.0	1719.9	1719.9	1717.7
5.0	1680.9	1678.6	1676.8	1676.8	1676.7	1676.7	1674.5	1674.2
7.5	1619.1	1614.7	1617.2	1613.1	1613.0	1608.7	1608.5	1607.9
10.0	1547.1	1538.4	1539.1	1541.2	1541.0	1534.5	1532.2	1531.2
12.5	1474.7	1466.8	1470.1	1468.0	1471.8	1467.6	1467.1	1465.1
15.0	1387.3	1383.1	1387.9	1389.3	1391.8	1387.7	1387.0	1384.7
17.5	1259.7	1253.0	1259.7	1260.9	1266.7	1262.4	1261.5	1260.2
20.0	1068.8	1064.9	1076.8	1081.5	1089.2	1083.0	1085.5	1081.8
22.5	856.5	856.0	861.2	865.3	871.7	873.1	873.3	871.3
25.0	645.6	641.6	646.1	648.9	656.9	657.9	660.9	660.3
27.5	461.7	458.6	462.6	465.4	472.0	472.7	476.2	474.7
30.0	316.6	315.5	318.9	321.4	326.3	326.7	328.1	327.2
32.5	210.3	210.1	212.5	214.3	217.0	217.1	217.4	216.7
35.0	138.7	138.5	140.0	140.9	142.5	142.0	142.3	142.2
37.5	92.0	91.9	92.7	93.1	94.2	93.8	94.2	94.2
40.0	62.6	62.5	63.0	63.3	63.6	63.6	63.7	63.8
42.5	43.5	43.5	43.6	43.9	44.1	44.0	44.1	44.2
45.0	30.4	30.4	30.6	30.6	30.9	30.9	30.9	31.0
47.5	21.2	21.3	21.4	21.4	21.7	21.8	21.9	21.9
50.0	14.2	14.2	14.3	14.3	14.5	14.6	14.7	14.9
60.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
70.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
80.0	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
90.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3