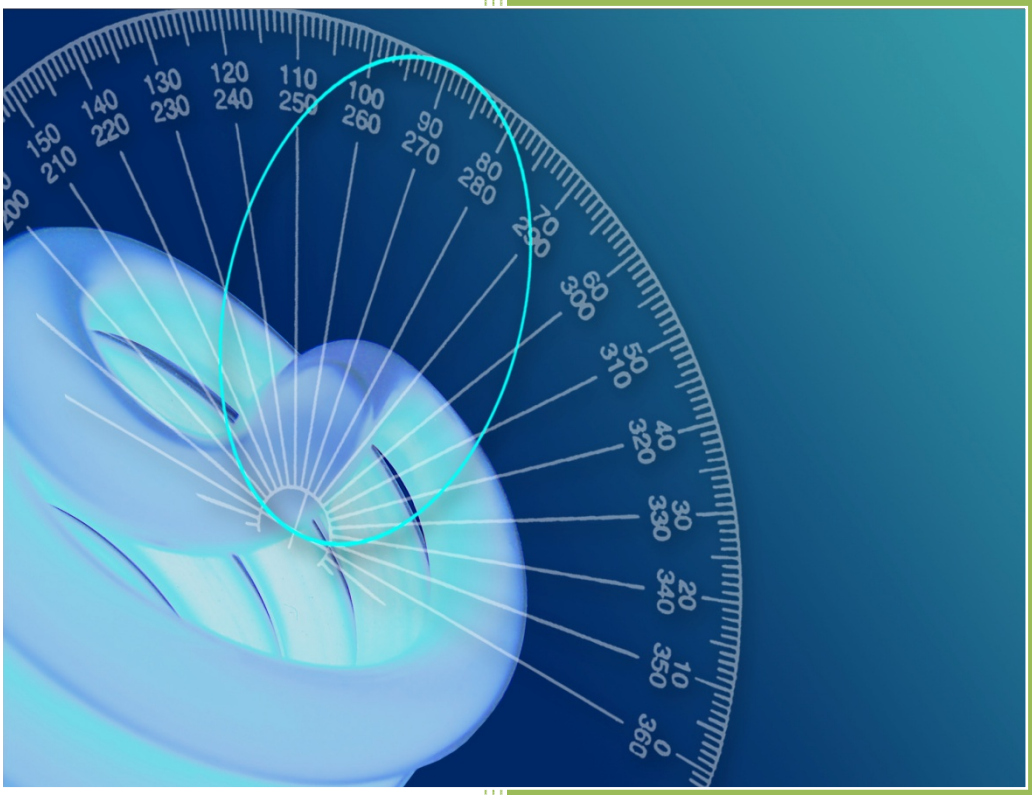
PHOTOMETRIC & OPTICAL TESTING

Photometric Test Report



Photometric and Optical Testing Services
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POTS Photometric Test Report

Report Number: POTS/12011_3	Report Date: 03-02-2012	Prepared By: G John
Test Laboratory: Photometric and Optical Testing Services, Cotswold Business Centre, 42 A P Ellis Road, Rissington Business Park, Upper Rissington, Gloucestershire, GL54 2QB		
Company Registration Number: Registered in England & Wales No. OC352911		
Registered Address: Thistle Down Barn, Holcot Lane, Sywell, Northampton, NN6 0BG		

Client Details

Contact:	Company: LEDlite
Address:	
	Email: info@ledlite.co.uk

Details of Product Tested

Manufacturer: LEDLite	Source Type: Fire rated dimmable downlight
Model: 50 degree wide warmer white	Serial Number: LTFD12WW
Description: LED downlight	
Lamp Type: LED	
Power Supply Used: Interruptible AC power supply	
Input voltage(V): 241.2	Input Current (mA): 52
Input power(W): 9.929	Power factor: 0.7760
Length of luminaire (mm):80	Diameter of Luminaire (mm): 80

Results	
Flux (lumens): 547.5 lumens	
CIE 1931 Chromaticity Cx: 0.4472	CIE 1931 Chromaticity Cy: 0.4211
CRI (%): 59.90	CCT (K): 2972

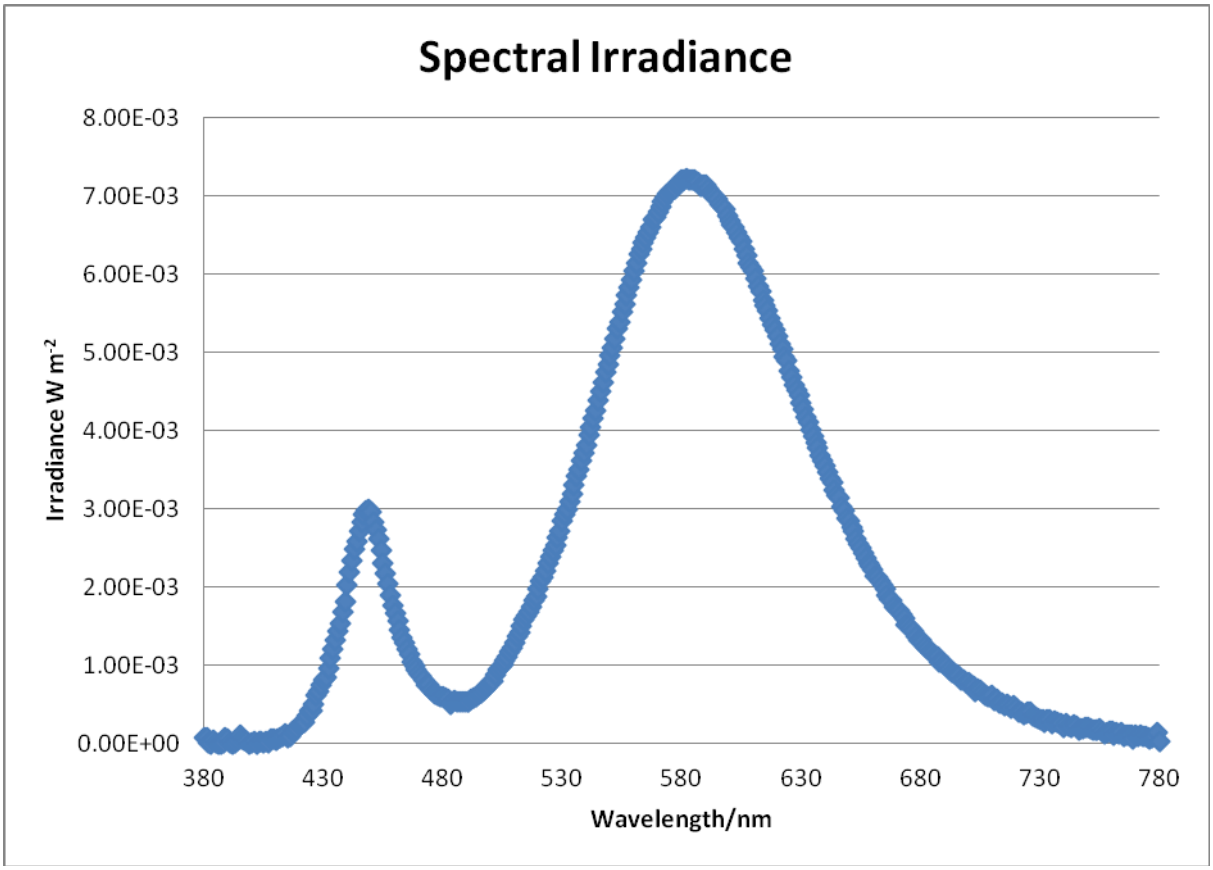

Figure 1: Spectral Irradiance

Figure 2: CIE 1931 2° Chromaticity Diagram

Goniophotometer Test		
Date of Test: 31-01-2012	Ambient Temperature: 25°C	
Measurement Filename: 50 deg wide w warm		
Instrument Used: Radiant Imaging NFMS0800 Goniometer with ProMetric PM-1200N-1 Imaging Photometer		
Photometer Working Distance: 2m	Measurement Geometry: Far-Field	
Comments:		
Reference Photometer Used: Specbos1201	Reference Photometer Serial Number: 2911670	
Traceable: to NPL standards, UKAS Accredited	Calibration Certificate Number: 121104	
Calibration Certificate Date: 25th October 2011	Sample Stabilisation Time (minutes):60	
Reference Photometer Calibration Uncertainty: ± 2.4% (*k=2*, 20-200 lux, CIE illuminant A source)		
Scan Set Up		
Direction	Range	Increment
Inclination Zone 1	0-90°	3°
Azimuth	0-360°	10°
Results (after stabilisation)		
Integrated Luminous Flux (lumens): 547.5	Peak Intensity (1° Spot, candelas): 1378.1	
Beam Angle (50% of max intensity C0-180, degrees): 35.0		
Photometric Filename (IES LM-63-2002): 50 deg wide w warm		
IES File – Absolute or Relative Format? Absolute		
Photometric Filename (EULUMDAT): 50 deg wide w warm		
EULUMDAT File – Absolute or Relative Format? Absolute		

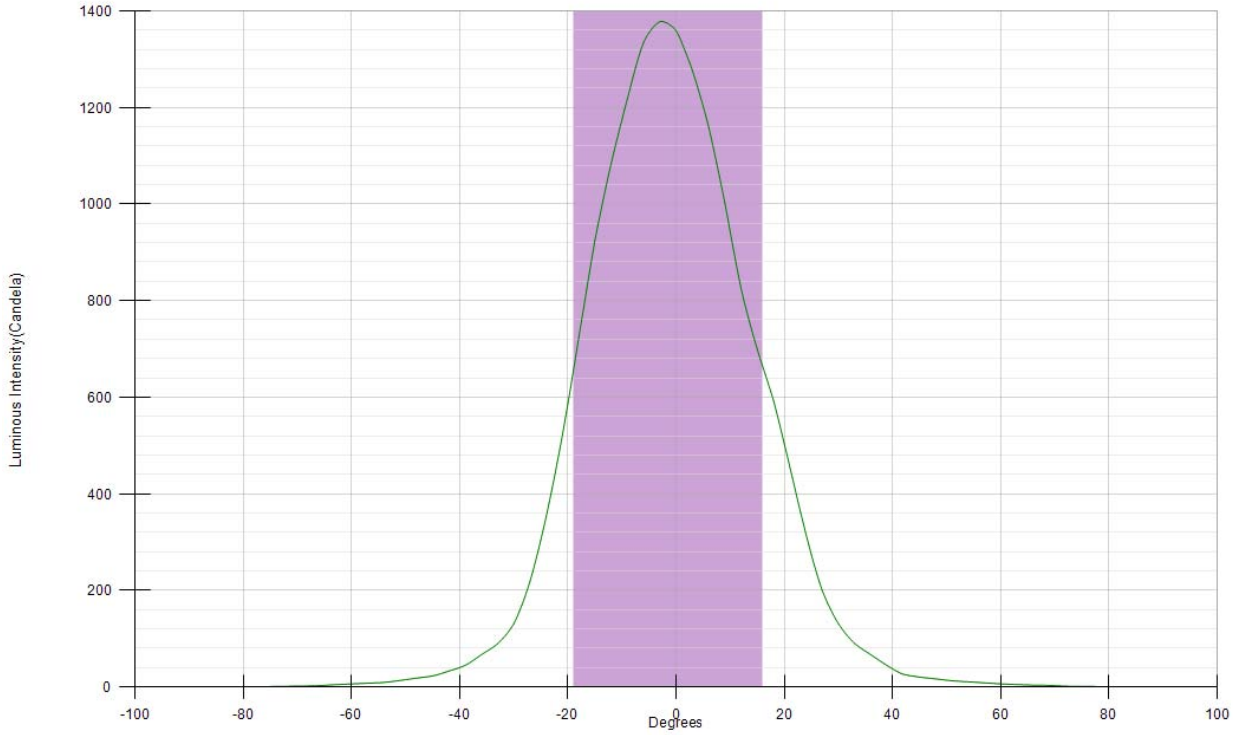

Figure 3: Far-Field Luminous Intensity (C0-180, Cartesian Coordinates)

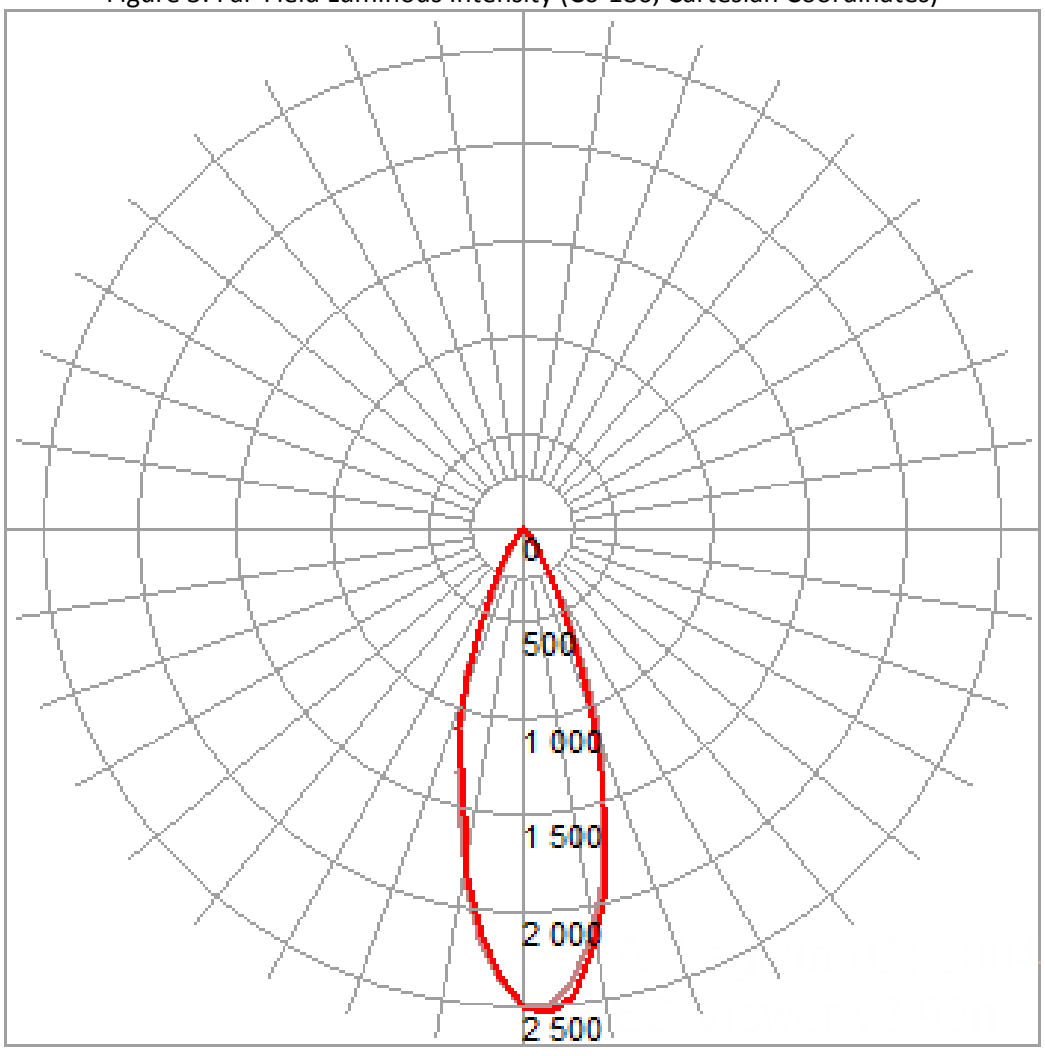

Figure 4: Far-Field Luminous Intensity (C0-180, C90-270, Polar Coordinates)

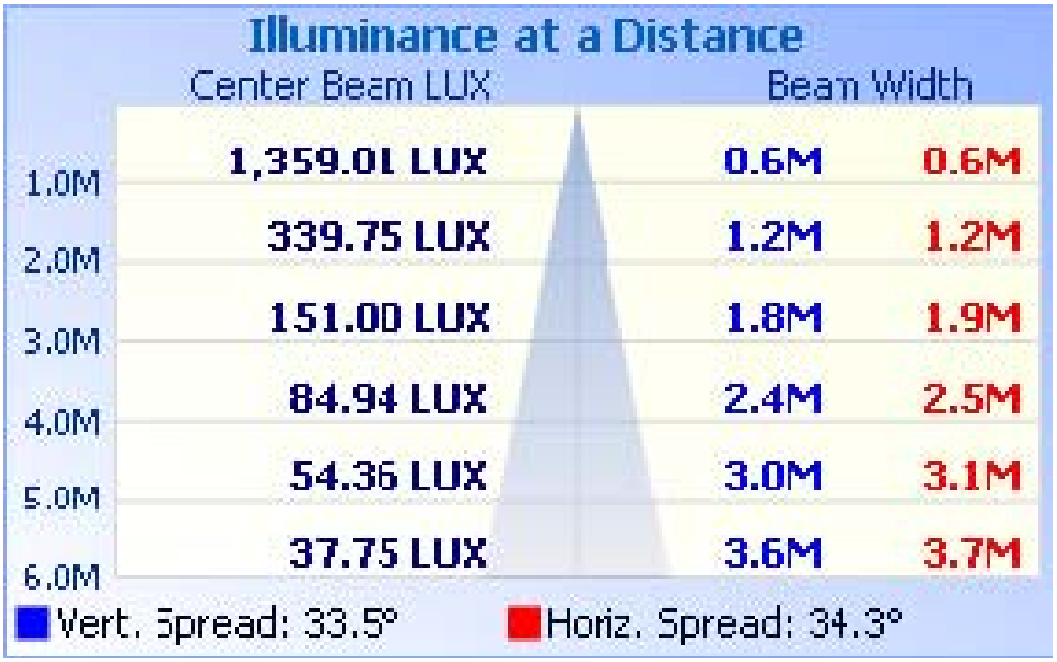

Figure 5. Illuminance cone diagram.

	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270
0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0
3	1378.0	1388.5	1394.7	1394.9	1392.9	1389.5	1384.8	1378.4	1371.3	1364.0	1355.5	1345.1	1333.3	1320.6	1309.4	1305.8	1286.6	1283.1	1277.1	1269.8	1263.1	1271.1	1263.6	1265.7	1272.4	1277.2	1281.6	1288.8
6	1335.2	1343.2	1359.9	1365.3	1358.9	1349.8	1342.4	1327.3	1315.3	1301.4	1281.3	1265.6	1246.3	1225.5	1215.7	1205.1	1187.6	1166.0	1160.3	1148.0	1153.3	1148.4	1142.0	1139.6	1145.7	1153.2	1161.6	1173.8
9	1218.4	1229.9	1246.7	1244.1	1246.5	1240.8	1233.2	1220.6	1205.7	1186.2	1165.4	1143.7	1112.9	1086.6	1061.6	1038.3	1033.3	1007.1	1002.4	984.6	985.5	966.9	972.4	976.4	988.4	1001.1	1011.8	1032.0
12	1084.5	1089.5	1099.5	1109.8	1120.8	1110.4	1101.4	1078.5	1062.6	1043.0	1019.3	991.8	965.9	940.8	920.0	881.2	859.8	839.7	825.5	813.2	807.2	802.4	817.7	824.8	823.7	838.2	848.9	866.8
15	924.9	929.9	951.4	956.6	956.9	962.0	943.9	931.1	904.6	890.3	860.2	835.9	797.1	774.7	748.4	722.9	710.4	694.9	699.1	685.2	689.1	685.0	684.3	692.1	695.8	702.4	699.9	718.7
18	722.4	745.2	743.3	764.4	759.6	771.2	749.9	742.1	740.2	725.5	710.4	691.8	658.5	638.7	633.0	611.0	597.9	591.6	592.8	591.1	575.8	578.5	567.0	571.4	563.1	566.0	580.3	576.5
21	522.5	544.7	550.6	559.0	571.3	572.5	575.3	586.7	576.3	565.3	553.9	549.5	519.3	501.4	495.7	480.0	465.5	453.1	456.4	446.1	443.2	440.6	434.4	415.6	414.9	422.8	425.0	438.8
24	353.4	365.9	375.0	376.2	405.3	402.5	414.4	413.4	407.9	400.3	386.8	379.1	356.1	344.0	334.9	314.1	320.0	307.6	316.3	307.8	310.3	288.9	286.0	272.4	275.3	279.8	285.5	282.6
27	218.7	228.3	225.8	239.1	260.4	253.3	252.7	259.0	250.9	254.8	254.9	248.0	236.1	236.0	211.4	199.2	192.0	193.8	199.8	192.6	195.6	187.2	176.7	168.1	180.0	173.1	166.5	174.1
30	130.7	134.3	141.2	155.6	151.1	151.5	161.8	160.0	154.7	154.9	159.4	151.4	131.4	140.0	122.2	124.5	120.1	125.4	130.5	126.0	122.4	126.5	120.2	115.9	120.1	117.3	115.3	112.4
33	89.3	91.4	95.9	101.8	98.2	103.8	103.7	101.3	104.2	106.4	103.0	100.5	93.1	90.6	92.1	90.6	90.0	91.4	89.8	91.6	89.4	91.8	89.2	83.0	81.9	83.4	80.3	81.9
36	66.6	66.1	67.9	73.4	72.9	73.3	73.4	74.7	73.7	73.1	71.8	71.7	73.2	67.6	66.5	66.7	64.3	64.2	66.5	65.1	62.8	66.9	64.6	60.6	60.3	58.9	57.6	59.4
39	44.4	44.6	46.2	47.6	48.8	51.4	51.8	51.4	50.3	49.2	50.1	51.8	49.5	46.4	44.5	42.7	42.0	40.2	44.2	43.0	42.1	39.8	43.9	41.5	40.3	39.5	38.7	39.8
42	32.7	30.1	32.2	32.7	32.8	34.9	34.9	33.1	33.6	32.9	33.7	33.4	32.2	28.5	28.3	25.7	25.3	24.0	26.1	27.5	26.3	25.6	29.5	26.9	26.3	25.5	26.0	25.5
45	22.6	22.5	22.3	23.9	24.0	23.4	23.9	23.7	24.5	25.6	24.0	22.8	22.3	20.5	18.7	18.3	18.9	18.4	20.2	20.2	18.8	19.3	17.7	19.4	19.1	18.9	19.8	19.2
48	18.1	15.7	17.3	18.6	17.3	17.5	17.6	19.0	19.2	20.3	19.1	17.4	17.5	15.7	16.0	15.4	16.7	15.1	16.4	15.9	15.2	15.9	14.3	14.4	13.9	15.6	14.9	15.7
51	13.3	11.5	12.5	14.4	13.8	13.3	14.0	14.9	14.7	15.2	14.1	12.7	13.4	12.3	11.7	12.3	13.9	12.3	12.6	12.5	11.5	13.4	11.1	11.0	11.6	13.3	12.2	12.1
54	9.2	9.3	9.6	10.2	8.9	9.9	10.5	10.9	12.2	9.9	11.0	9.7	10.6	9.0	8.6	8.8	9.7	8.5	10.5	9.5	9.1	8.1	7.9	8.2	7.9	9.0	7.8	9.3
57	7.6	7.5	6.7	6.3	6.6	7.0	7.0	7.7	8.3	8.1	8.5	7.1	6.5	6.4	6.6	6.2	6.5	6.7	8.3	7.3	6.8	6.1	5.9	5.9	5.8	6.4	6.1	7.0
60	6.0	4.6	4.8	5.3	4.9	5.2	5.4	5.4	6.4	6.1	5.6	5.1	4.7	4.6	5.1	4.5	5.0	4.8	6.2	5.1	4.5	4.6	4.3	4.2	4.1	4.2	4.6	4.7
63	4.4	3.1	3.1	3.2	3.2	3.6	3.6	3.8	4.2	4.5	4.2	3.6	3.2	3.2	3.5	3.1	3.3	3.3	4.8	3.7	3.3	3.0	3.0	3.0	2.8	3.0	3.3	3.5
66	2.6	2.2	1.8	2.1	2.2	2.6	2.5	2.7	3.4	4.0	2.9	2.1	2.2	2.5	2.2	2.2	2.0	2.5	3.6	2.8	2.0	1.9	2.1	2.1	1.9	2.0	2.4	2.6
69	1.7	1.2	1.0	1.2	1.4	1.6	1.5	1.6	2.3	3.2	2.1	1.4	1.5	1.6	1.4	1.3	1.3	1.8	3.0	2.0	1.3	1.2	1.4	1.4	1.3	1.4	1.9	1.8
72	1.2	0.6	0.4	0.6	0.9	1.0	0.9	0.7	1.5	2.9	1.4	0.8	0.9	1.0	1.0	0.9	0.7	1.2	1.4	0.9	0.7	0.7	0.8	0.8	0.7	0.7	1.1	2.5
75	0.7	0.3	0.1	0.2	0.4	0.6	0.4	0.3	0.9	2.3	0.7	0.3	0.4	0.5	0.5	0.4	0.3	0.5	1.1	0.4	0.2	0.2	0.3	0.4	0.3	0.2	0.5	1.8
78	0.2	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.4	1.5	0.2	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.6	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1.1
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 1. Luminous intensity values

Signature:

_____

Print Name:

GH JOHN

_____

Date:

03-02-2012

_____

Partner / Director
Duly authorised to sign on behalf of:
Photometric and Optical Testing Services LLP