

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P242822

Luminaire Tested: S125DRP-S850D930-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242822
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-22)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-S850D930-X4F0-XX-UDD-A-W
Description: DEFINE 5 DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

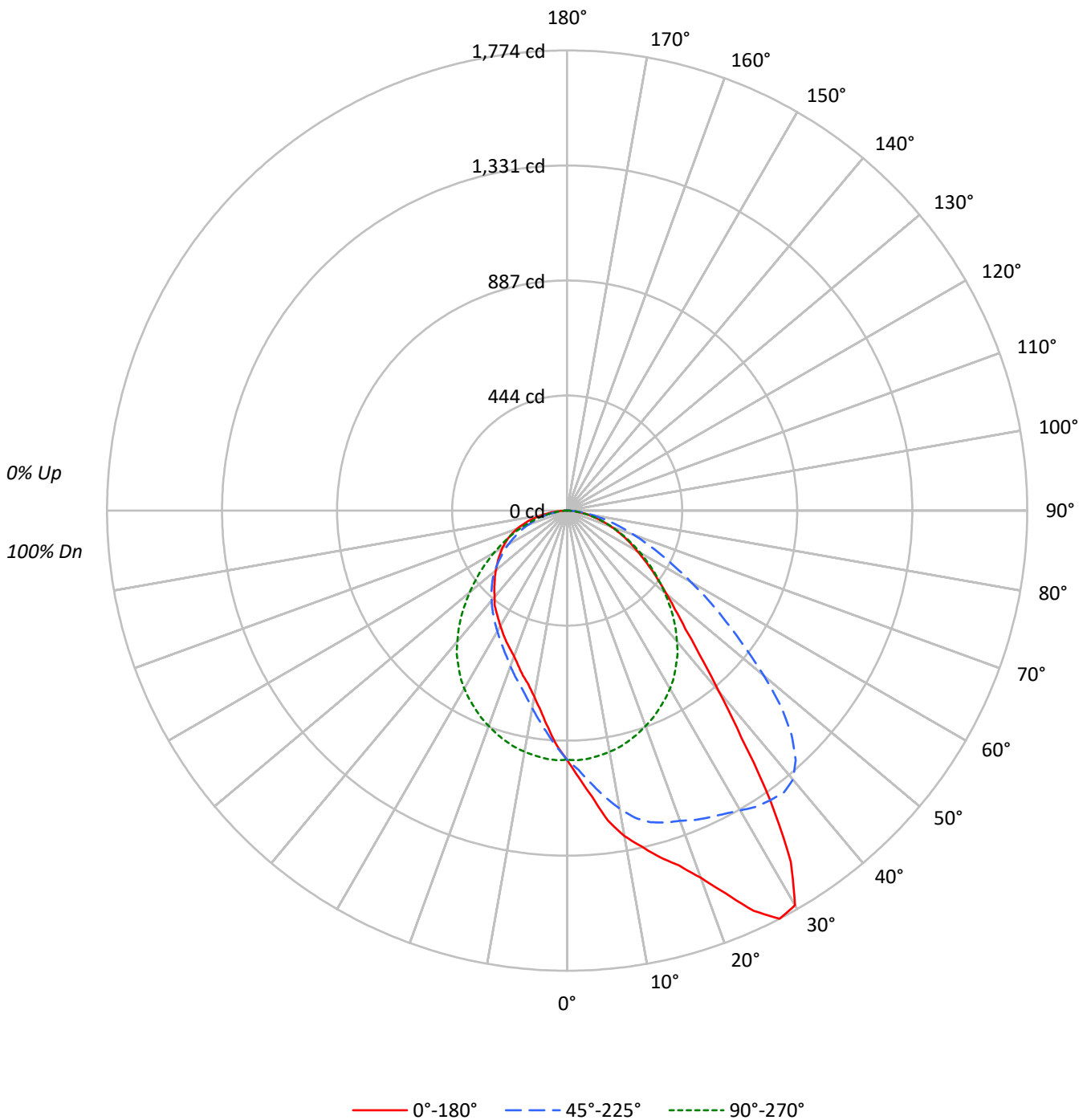
Lumens per Lamp: N/A
Luminaire Lumens: 2710.2 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.23 / 1.53
Luminous Opening: Rectangular (W 3.88' x L: 0.39' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P242822

CATALOG NUMBER: S125DRP-S850D930-X4F0-XX-UDD-A-W

Luminous Intensity Polar Plot



TEST NUMBER: P242822

CATALOG NUMBER: S125DRP-S850D930-X4F0-XX-UDD-A-W

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	80	98	90	84	79	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61					61			
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53					53			
5	78	65	56	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46					46			
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41					41			
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36					36			
8	62	49	41	35	61	48	40	35	47	40	34	46	39	34	44	39	34	32					32			
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6826	6826	6826	6826	6826
5°	7904	7530	6849	6160	5997
10°	9197	8419	6814	5581	5254
15°	10180	9151	6764	5129	4847
20°	11395	9625	6684	4832	4520
25°	13350	10226	6594	4581	4360
30°	14419	10953	6506	4413	4222
35°	11856	11830	6342	4297	4131
40°	8426	12563	6111	4202	4031
45°	6474	12296	5802	4118	3974
50°	5526	10939	5418	4016	3966
55°	4919	9289	5041	3869	4000
60°	4438	7845	4630	3731	4102
65°	4100	6683	4216	3543	4209
70°	3728	5683	3786	3304	4268
75°	3290	4858	3336	3045	4232
80°	2771	3987	2718	2587	3872
85°	2194	2895	1965	2128	3123

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 12296 cd/sqm



TEST NUMBER: P242822

CATALOG NUMBER: S125DRP-S850D930-X4F0-XX-UDD-A-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.4	3.4
10°-20°	275.3	10.2
20°-30°	447.2	16.5
30°-40°	546.5	20.2
40°-50°	495.8	18.3
50°-60°	394.9	14.6
60°-70°	275.1	10.1
70°-80°	146.5	5.4
80°-90°	36.3	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	815.0	30.1
0°-40°	1361.5	50.2
0°-60°	2252.3	83.1
0°-90°	2710.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2710.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	960	960	960	960	960	
5°	1108	1055	960	863	840	111
15°	1384	1244	919	697	659	395
25°	1702	1304	841	584	556	780
35°	1366	1364	731	495	476	838
45°	644	1223	577	410	395	513
55°	397	750	407	312	323	357
65°	244	397	251	211	250	242
75°	120	177	122	111	154	129
85°	27	36	24	26	38	31
90°	0	0	0	0	0	



TEST NUMBER: P242822

CATALOG NUMBER: S125DRP-S850D930-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4
2.5°	1029.7	1028.0	1026.4	1023.2	1025.6	1018.7	1015.4	1009.7	1002.8	1000.3	997.5
5°	1107.9	1110.0	1112.0	1103.5	1104.3	1098.6	1085.5	1074.9	1066.4	1055.4	1047.6
7.5°	1205.0	1198.8	1199.2	1193.9	1184.6	1176.8	1164.2	1146.7	1130.8	1112.8	1097.3
10°	1274.3	1274.7	1271.0	1264.5	1254.3	1246.9	1229.0	1211.9	1191.1	1166.6	1149.1
12.5°	1326.4	1328.5	1323.6	1314.2	1310.5	1291.8	1278.7	1257.5	1231.9	1213.5	1184.6
15°	1383.5	1379.0	1375.8	1364.7	1356.2	1339.1	1316.6	1295.4	1268.5	1243.7	1218.8
17.5°	1434.0	1437.7	1432.4	1424.3	1399.0	1379.0	1351.3	1324.4	1292.2	1261.2	1232.3
20°	1506.6	1509.9	1500.5	1483.0	1451.2	1431.2	1391.7	1354.1	1315.4	1272.6	1240.0
22.5°	1597.1	1593.0	1579.6	1550.6	1524.1	1483.0	1439.3	1391.7	1340.7	1291.0	1244.9
25°	1702.3	1685.1	1677.4	1644.4	1608.1	1553.9	1495.2	1428.3	1368.0	1304.0	1248.6
27.5°	1774.0	1767.1	1756.1	1729.2	1687.6	1626.0	1556.7	1476.8	1395.7	1317.5	1247.8
30°	1756.9	1757.7	1758.5	1751.2	1726.7	1683.1	1614.2	1526.6	1425.5	1334.6	1250.6
32.5°	1605.2	1623.6	1641.1	1663.9	1678.6	1679.0	1642.3	1565.3	1460.5	1354.1	1249.0
35°	1366.4	1370.9	1416.9	1462.6	1524.5	1572.6	1604.8	1569.8	1482.1	1363.5	1247.8
37.5°	1104.7	1127.1	1161.7	1213.1	1306.0	1381.9	1481.3	1515.6	1474.4	1371.3	1247.3
40°	908.2	928.6	949.4	1002.0	1077.4	1174.4	1291.4	1391.2	1414.5	1354.1	1235.1
42.5°	756.6	771.6	795.3	831.6	891.5	974.6	1085.1	1223.3	1317.9	1304.4	1209.4
45°	644.1	654.2	672.2	703.6	749.2	816.5	915.1	1057.8	1182.1	1223.3	1165.8
47.5°	564.2	564.6	579.2	601.7	636.3	698.3	772.1	889.4	1023.6	1118.5	1105.1
50°	499.8	497.7	508.7	527.5	553.6	591.5	661.2	750.4	878.0	989.3	1020.3
52.5°	444.3	445.1	450.8	463.5	484.3	515.2	562.9	641.2	745.6	860.5	925.7
55°	397.0	395.4	403.1	412.5	428.4	449.6	487.1	548.7	637.1	749.6	825.5
57.5°	351.4	355.9	359.1	365.6	379.5	394.2	427.6	474.9	547.9	647.7	728.0
60°	312.2	316.7	319.2	325.7	336.3	348.5	373.0	409.7	468.8	551.9	631.4
62.5°	277.2	280.4	280.9	286.6	294.7	306.5	324.5	353.8	397.4	467.6	545.0
65°	243.8	243.8	245.4	251.5	255.6	266.2	280.9	303.3	340.8	397.4	463.9
67.5°	211.2	213.2	212.8	215.6	219.3	228.3	239.3	258.0	287.8	330.6	385.6
70°	179.4	181.0	180.6	182.6	186.7	192.0	200.6	218.1	238.1	273.5	319.2
72.5°	150.8	151.2	150.0	152.9	154.9	159.4	169.2	176.5	194.8	223.4	258.8
75°	119.8	120.7	121.5	123.1	125.6	128.0	132.9	142.3	154.5	176.9	201.0
77.5°	95.4	93.3	95.8	95.4	96.6	98.6	103.1	108.4	119.0	134.1	154.1
80°	67.7	68.1	68.1	68.5	70.5	71.7	75.4	79.1	86.8	97.4	110.5
82.5°	44.8	46.1	45.2	46.1	47.7	48.5	50.1	53.0	56.7	64.4	73.0
85°	26.9	24.9	25.7	26.5	26.5	26.9	28.5	29.8	32.2	35.5	39.1
87.5°	9.8	10.6	11.0	11.0	11.4	11.4	13.0	13.0	14.3	15.5	17.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P242822

CATALOG NUMBER: S125DRP-S850D930-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4
2.5°	995.0	992.2	988.9	983.2	976.3	972.6	966.9	963.2	955.9	949.8	943.3
5°	1038.2	1027.6	1017.9	1005.2	991.4	982.4	971.8	960.0	947.7	935.1	921.2
7.5°	1081.4	1063.9	1044.8	1024.8	1005.2	986.9	969.8	952.2	936.3	916.4	899.6
10°	1125.1	1101.4	1076.1	1046.4	1017.4	992.2	966.5	944.1	921.2	896.8	875.2
12.5°	1168.7	1135.3	1096.9	1063.5	1027.2	995.4	964.0	933.9	903.7	876.0	849.9
15°	1184.6	1156.9	1123.8	1077.4	1038.2	996.2	956.3	919.2	884.6	854.4	822.6
17.5°	1200.1	1164.6	1129.5	1084.7	1033.8	988.5	943.3	902.9	864.6	826.7	797.7
20°	1203.7	1167.0	1130.0	1086.3	1033.8	979.9	934.7	883.7	841.8	802.2	764.7
22.5°	1202.5	1159.7	1118.5	1073.3	1022.3	973.8	916.8	864.6	818.1	779.4	739.8
25°	1193.5	1149.1	1098.6	1053.3	1002.8	950.2	894.7	840.9	794.5	750.0	711.3
27.5°	1188.2	1132.0	1076.6	1024.4	975.9	927.4	873.6	818.1	767.2	721.9	686.0
30°	1176.4	1113.2	1048.8	993.8	943.7	896.8	846.6	792.8	739.0	695.0	655.9
32.5°	1165.8	1089.6	1020.7	959.6	905.8	860.5	815.3	764.7	712.1	667.3	628.2
35°	1151.6	1066.4	988.5	920.8	864.2	817.3	778.6	730.9	682.4	639.2	601.7
37.5°	1134.8	1036.2	953.9	883.3	821.8	772.9	736.2	699.1	650.6	608.2	574.8
40°	1114.5	1003.6	915.1	842.6	778.2	726.8	693.4	658.7	620.0	581.3	545.4
42.5°	1088.8	974.2	876.0	796.5	732.9	683.2	647.7	619.6	586.6	551.1	518.5
45°	1056.2	937.6	833.2	749.2	684.8	635.5	599.2	577.2	551.5	517.3	489.2
47.5°	1013.0	896.0	788.4	701.5	635.1	589.4	554.8	533.2	514.4	487.5	461.0
50°	951.4	848.3	739.0	653.0	586.6	540.5	509.1	490.0	474.5	454.9	433.3
52.5°	882.5	788.4	690.5	605.7	540.1	494.9	464.3	448.0	435.8	423.1	401.9
55°	808.7	727.2	634.3	553.6	492.8	448.4	421.5	406.8	396.2	385.6	372.6
57.5°	729.3	663.2	578.0	502.6	446.4	404.8	379.5	364.4	355.9	350.2	342.0
60°	644.5	589.8	518.9	451.7	397.0	361.2	336.7	325.7	318.8	314.3	308.6
62.5°	565.8	523.4	459.0	399.1	353.0	319.6	298.4	287.8	281.3	279.6	275.2
65°	488.7	454.1	399.9	348.9	308.2	279.2	260.9	250.7	246.6	244.2	244.6
67.5°	411.3	388.9	343.6	298.8	265.4	239.7	224.6	216.9	214.8	211.2	211.2
70°	341.6	325.7	289.0	251.1	222.2	203.4	190.4	182.2	180.2	178.5	178.1
72.5°	280.0	266.6	236.0	207.5	182.2	166.3	156.1	152.0	148.4	147.6	147.6
75°	219.7	212.0	186.7	162.6	144.7	133.3	126.0	121.5	119.0	118.6	119.0
77.5°	165.9	158.6	141.0	123.1	111.3	102.3	95.4	94.2	90.9	91.3	90.5
80°	117.4	112.9	102.7	89.3	79.9	72.6	69.3	66.4	65.6	64.4	65.6
82.5°	77.0	72.2	66.0	58.7	51.4	47.7	44.4	44.0	43.6	43.2	43.2
85°	42.0	42.4	38.3	31.8	28.5	26.1	24.1	24.1	23.6	23.2	23.6
87.5°	17.9	17.1	15.5	14.3	12.2	11.0	10.6	11.0	9.8	9.4	9.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P242822

CATALOG NUMBER: S125DRP-S850D930-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4
2.5°	939.6	935.1	931.4	923.3	918.8	912.7	907.8	913.1	907.4	909.8	906.2
5°	914.3	902.9	894.7	882.9	872.7	863.4	856.4	855.2	851.9	850.3	845.4
7.5°	884.2	871.1	857.7	843.0	830.8	817.7	810.0	802.6	798.1	792.4	787.9
10°	858.1	838.9	822.6	803.8	787.5	773.3	761.9	756.2	750.9	743.1	740.3
12.5°	825.9	805.9	785.1	764.7	749.2	732.9	723.5	714.2	710.9	701.9	701.5
15°	801.4	771.6	752.1	731.7	710.1	697.0	688.9	679.5	675.4	669.3	664.8
17.5°	771.2	744.3	719.9	699.1	679.5	668.9	658.3	651.8	644.9	640.4	633.1
20°	737.8	712.5	688.1	665.7	651.4	638.8	630.6	624.5	617.2	615.1	607.8
22.5°	709.7	681.2	657.9	640.0	624.1	609.4	600.4	596.8	592.3	584.9	584.9
25°	678.7	649.8	629.8	611.0	597.2	584.1	578.0	572.7	567.8	563.3	561.7
27.5°	652.6	626.9	602.5	585.4	573.5	561.3	556.0	549.1	545.4	541.7	536.8
30°	624.9	598.4	577.6	561.3	548.3	537.7	532.0	527.5	524.2	521.0	518.5
32.5°	596.4	572.3	552.3	536.4	523.4	516.1	511.2	508.3	504.6	500.6	497.3
35°	571.9	545.0	525.4	511.6	501.4	495.3	489.6	486.7	482.6	482.6	479.4
37.5°	543.0	519.3	501.8	489.2	480.2	474.5	468.0	466.3	463.5	461.8	460.6
40°	517.7	496.1	479.8	467.1	457.4	452.9	448.0	444.7	443.1	441.1	440.2
42.5°	491.6	471.2	455.7	444.3	436.2	432.5	428.0	426.0	422.3	419.5	419.0
45°	465.1	445.1	430.9	421.5	414.2	409.7	406.8	401.9	400.3	397.0	396.6
47.5°	440.6	421.1	406.8	399.1	392.5	389.3	384.8	379.5	377.5	375.4	375.0
50°	412.5	395.0	381.9	374.6	368.5	363.2	358.7	355.5	354.2	354.2	355.0
52.5°	384.0	369.7	359.1	349.7	344.0	338.3	334.3	332.6	330.6	333.0	334.7
55°	356.3	341.2	333.0	324.5	318.8	312.2	310.2	309.4	308.2	311.4	313.1
57.5°	326.5	316.3	306.5	297.6	292.7	288.6	285.3	284.9	287.4	288.2	293.1
60°	298.4	286.2	277.6	271.1	265.0	262.5	261.7	260.9	262.5	267.0	273.9
62.5°	267.4	258.0	248.7	244.2	240.1	235.6	235.6	236.4	240.1	245.4	252.3
65°	237.2	228.7	222.6	216.9	213.2	210.7	211.6	213.2	216.9	223.8	231.5
67.5°	206.3	200.6	194.8	189.5	185.9	186.3	186.7	188.7	193.2	201.4	208.7
70°	176.5	170.0	165.5	163.5	160.6	159.0	161.4	165.5	169.2	176.5	182.6
72.5°	146.7	141.4	138.2	137.0	136.1	134.9	135.3	139.8	145.1	152.5	159.8
75°	117.4	115.4	112.9	111.3	110.1	110.9	111.7	115.8	119.8	127.6	135.7
77.5°	90.9	88.5	86.8	86.4	85.6	86.0	88.0	91.3	95.4	101.1	107.6
80°	64.8	64.0	63.2	62.8	62.8	63.2	66.4	68.5	72.2	77.4	82.3
82.5°	42.8	42.4	42.4	42.4	42.8	42.8	44.4	47.3	50.1	53.8	57.9
85°	24.9	24.1	25.3	25.7	24.9	26.1	26.9	28.5	29.8	31.8	33.8
87.5°	10.2	11.0	10.6	11.0	11.0	11.8	11.4	13.0	13.9	14.7	14.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P242822

CATALOG NUMBER: S125DRP-S850D930-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	960.4	960.4	960.4	960.4
2.5°	903.7	906.6	904.1	907.4
5°	843.4	839.7	842.2	840.5
7.5°	787.5	784.3	779.4	777.8
10°	735.8	731.3	730.9	728.0
12.5°	697.9	693.8	688.1	687.3
15°	662.4	659.1	656.3	658.7
17.5°	632.2	629.4	628.6	626.1
20°	604.1	602.1	602.9	597.6
22.5°	581.7	577.2	576.4	576.4
25°	558.0	556.0	554.0	556.0
27.5°	537.3	535.2	534.4	534.8
30°	518.5	514.4	514.8	514.4
32.5°	498.1	495.7	494.9	494.0
35°	478.2	478.2	476.1	476.1
37.5°	459.8	459.4	458.2	459.0
40°	438.6	438.2	437.0	434.5
42.5°	418.2	416.6	416.2	415.8
45°	396.6	396.6	395.8	395.4
47.5°	375.4	376.2	377.9	377.5
50°	356.7	357.1	358.3	358.7
52.5°	335.9	338.7	340.4	340.0
55°	316.7	319.6	322.4	322.8
57.5°	297.6	301.2	304.1	304.9
60°	278.0	283.3	287.0	288.6
62.5°	259.3	265.4	269.0	269.0
65°	238.5	244.6	247.8	250.3
67.5°	216.9	223.0	226.2	228.3
70°	192.8	198.9	203.8	205.4
72.5°	169.2	174.5	178.1	180.2
75°	141.0	148.4	152.0	154.1
77.5°	114.1	121.5	123.5	124.7
80°	87.2	91.3	94.2	94.6
82.5°	62.0	65.2	65.6	66.9
85°	36.7	38.3	38.7	38.3
87.5°	15.1	14.7	14.7	15.5
90°	0.0	0.0	0.0	0.0



TEST NUMBER: P242822
 CATALOG NUMBER: S125DRP-S850D930-X4F0-XX-UDD-A-W

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	17.33	18.90	17.69	19.21	19.53	17.30	18.87	17.67	19.18	19.50
	3H	18.70	20.11	19.08	20.44	20.80	18.73	20.14	19.11	20.47	20.83
	4H	19.19	20.52	19.59	20.87	21.24	19.22	20.54	19.62	20.89	21.27
	6H	19.53	20.76	19.94	21.12	21.51	19.53	20.76	19.94	21.12	21.52
	8H	19.62	20.79	20.05	21.18	21.58	19.61	20.78	20.04	21.17	21.57
	12H	19.67	20.79	20.10	21.17	21.60	19.65	20.77	20.08	21.15	21.58
4H	2H	18.84	20.16	19.23	20.51	20.89	18.38	19.71	18.78	20.05	20.43
	3H	20.18	21.28	20.59	21.68	22.08	20.04	21.15	20.45	21.55	21.95
	4H	20.69	21.68	21.12	22.10	22.54	20.60	21.59	21.03	22.01	22.44
	6H	21.06	21.93	21.52	22.37	22.83	20.97	21.84	21.43	22.28	22.74
	8H	21.16	21.97	21.63	22.42	22.88	21.07	21.88	21.53	22.32	22.79
	12H	21.23	21.95	21.71	22.43	22.90	21.12	21.85	21.60	22.33	22.80
8H	4H	21.17	21.98	21.63	22.43	22.89	20.94	21.75	21.40	22.19	22.66
	6H	21.62	22.29	22.12	22.78	23.26	21.44	22.11	21.94	22.60	23.08
	8H	21.77	22.37	22.28	22.88	23.36	21.59	22.19	22.10	22.70	23.19
	12H	21.87	22.40	22.38	22.89	23.46	21.69	22.22	22.19	22.71	23.27
12H	4H	21.22	21.95	21.70	22.42	22.89	20.96	21.68	21.44	22.16	22.63
	6H	21.71	22.31	22.22	22.82	23.30	21.49	22.09	22.00	22.60	23.09
	8H	21.90	22.43	22.41	22.92	23.48	21.69	22.23	22.20	22.72	23.28