

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: P242923

Luminaire Tested: S125RDRP-S375D930-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2024  
Report Number: P242923  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-32)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S375D930-X4F0-XX-UDD-A-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

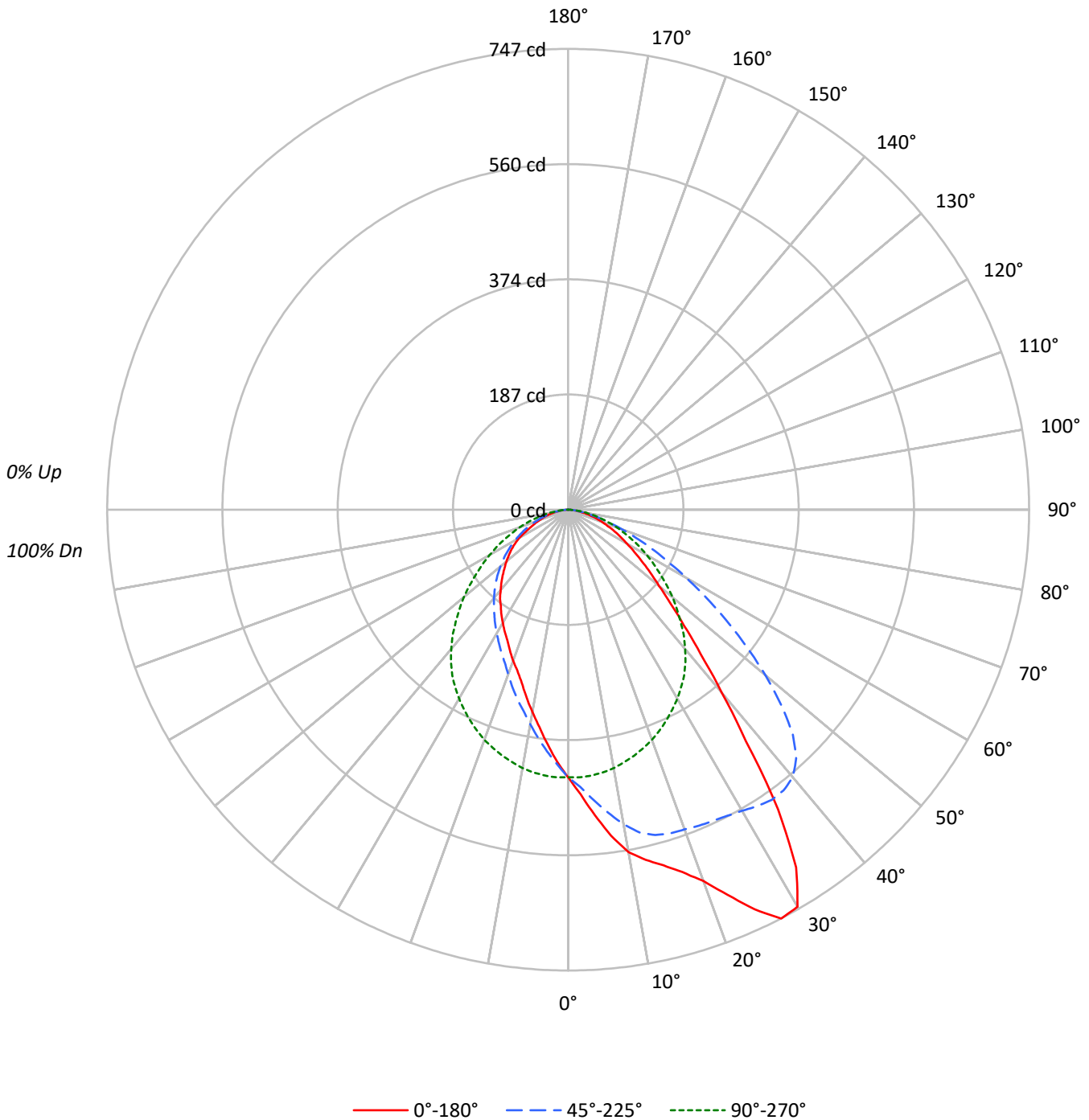
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1123.3 lumens  
Efficiency: N/A  
Efficacy: 96.8 lumens/watt  
Spacing Criteria (0/90/45): 1.4 / 1.21 / 1.48  
Luminous Opening: Rectangular (W 3.88' x L: 0.39' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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: P242923

CATALOG NUMBER: S125RDRP-S375D930-X4F0-XX-UDD-A-W

### Luminous Intensity Polar Plot





TEST NUMBER: P242923

CATALOG NUMBER: S125RDRP-S375D930-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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	69	78	72	67	76	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55					55			
5	79	66	58	52	77	65	57	51	63	56	51	61	55	50	60	54	50	48					48			
6	73	60	52	45	71	59	51	45	57	50	45	56	49	44	54	49	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	61	49	42	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	42	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°	135°	180°
0°	3082	3082	3082	3082	3082
5°	3545	3370	3086	2804	2725
10°	4067	3738	3070	2548	2405
15°	4392	4017	3038	2340	2138
20°	4844	4171	3002	2149	1973
25°	5606	4362	2953	2008	1831
30°	6099	4625	2902	1897	1738
35°	5145	4985	2843	1810	1652
40°	3593	5254	2736	1734	1578
45°	2666	5170	2592	1661	1507
50°	2125	4606	2443	1584	1444
55°	1804	3869	2256	1504	1389
60°	1558	3134	2090	1412	1301
65°	1389	2502	1910	1308	1120
70°	1220	1920	1750	1187	1020
75°	1054	1431	1516	1054	958
80°	802	1027	1273	941	802
85°	669	726	1003	799	758

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 5170 cd/sqm



TEST NUMBER: P242923

CATALOG NUMBER: S125RDRP-S375D930-X4F0-XX-UDD-A-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.6	3.7
10°-20°	121.9	10.9
20°-30°	193.3	17.2
30°-40°	233.5	20.8
40°-50°	208.0	18.5
50°-60°	159.5	14.2
60°-70°	103.6	9.2
70°-80°	50.3	4.5
80°-90°	11.8	1.1
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°	356.7	31.8
0°-40°	590.3	52.5
0°-60°	957.7	85.3
0°-90°	1123.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1123.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	434	434	434	434	434	
5°	497	472	432	393	382	49
15°	597	546	413	318	290	171
25°	715	556	377	256	234	329
35°	593	574	328	209	190	359
45°	265	514	258	165	150	210
55°	146	312	182	121	112	132
65°	83	149	114	78	67	82
75°	38	52	55	38	35	41
85°	8	9	12	10	9	10
90°	0	0	0	0	0	



TEST NUMBER: P242923

CATALOG NUMBER: S125RDRP-S375D930-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6
2.5°	461.7	461.3	462.0	460.1	460.3	457.2	457.2	454.9	451.9	449.6	448.5
5°	496.9	497.3	496.6	493.9	492.1	489.4	486.4	481.1	476.6	472.4	469.0
7.5°	532.9	533.2	530.9	530.4	525.7	522.9	516.1	509.2	503.1	495.1	489.4
10°	563.5	563.3	560.8	558.9	554.9	550.0	543.4	534.8	526.8	517.9	509.4
12.5°	581.3	580.7	580.4	577.9	574.3	570.1	564.7	556.4	546.0	536.1	525.7
15°	596.9	595.7	593.4	590.4	585.2	580.0	573.8	566.3	556.9	545.9	536.6
17.5°	615.8	616.0	612.4	609.2	602.5	593.9	584.7	573.3	561.2	550.0	540.7
20°	640.4	639.8	636.3	628.1	620.1	608.7	597.7	582.9	567.2	551.4	539.1
22.5°	675.6	674.0	670.3	658.9	645.4	629.9	611.5	592.7	572.9	554.4	537.3
25°	714.8	713.7	706.4	693.9	676.5	653.9	631.8	607.1	579.9	556.2	536.6
27.5°	747.2	745.0	738.4	726.7	709.6	685.2	654.8	622.7	590.4	559.2	532.3
30°	743.2	745.9	745.2	740.4	728.3	706.9	679.3	642.1	601.7	563.5	529.8
32.5°	687.4	689.7	697.7	710.7	714.6	709.2	690.4	656.7	614.6	569.7	527.9
35°	593.0	596.2	608.3	627.4	652.3	673.1	677.4	658.9	621.3	574.5	525.9
37.5°	473.1	493.9	502.1	521.5	560.6	598.5	631.5	638.9	618.7	573.4	523.6
40°	387.3	391.6	409.7	432.3	464.0	503.9	556.4	594.3	595.5	566.3	516.1
42.5°	317.5	323.2	334.2	351.2	377.1	417.0	471.6	524.7	553.3	546.8	506.3
45°	265.2	269.3	278.4	292.2	313.1	346.0	392.6	450.5	496.4	514.4	487.3
47.5°	224.3	226.4	234.8	246.0	262.0	286.9	324.8	377.1	431.8	468.3	461.1
50°	192.2	194.7	200.8	208.8	221.8	242.1	270.9	312.7	369.5	416.6	426.1
52.5°	167.3	169.3	172.5	179.9	190.1	204.5	226.4	263.2	312.9	363.8	388.7
55°	145.6	147.0	150.0	154.3	162.9	174.1	194.2	220.3	261.6	312.2	344.2
57.5°	127.1	127.8	129.6	133.8	140.1	148.4	163.7	187.6	217.5	265.0	300.3
60°	109.6	110.3	112.8	115.5	120.1	127.6	139.0	154.5	183.0	220.5	256.3
62.5°	95.8	96.1	96.8	99.5	103.4	108.7	117.1	129.0	150.2	182.1	215.4
65°	82.6	82.8	83.1	85.3	87.7	92.0	97.9	106.8	123.9	148.8	178.7
67.5°	69.4	69.8	71.0	71.7	74.8	76.9	80.6	87.7	100.9	118.7	142.9
70°	58.7	58.6	59.8	60.7	61.6	64.3	66.6	72.1	79.6	92.4	111.8
72.5°	48.8	48.2	48.6	48.8	50.0	51.6	53.9	56.8	62.1	69.9	83.7
75°	38.4	38.6	38.6	39.0	39.9	40.6	41.3	43.1	46.3	52.1	60.2
77.5°	28.8	28.5	29.4	29.4	30.1	31.0	31.5	32.2	33.5	36.1	40.9
80°	19.6	19.6	19.8	20.3	20.1	20.5	21.4	22.1	23.7	25.1	26.5
82.5°	13.9	13.7	13.9	13.9	13.9	14.2	14.4	14.4	14.8	15.3	16.2
85°	8.2	8.2	8.4	8.4	8.5	8.5	8.7	8.7	8.7	8.9	9.1
87.5°	3.9	3.7	3.6	3.6	3.7	4.1	3.9	3.7	3.7	3.7	3.9
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: P242923

CATALOG NUMBER: S125RDRP-S375D930-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6
2.5°	448.5	447.3	444.9	442.8	440.1	437.8	436.2	434.3	431.8	428.8	426.3
5°	465.2	461.3	456.2	451.7	446.0	441.6	436.9	432.5	428.0	422.3	417.4
7.5°	483.7	476.1	469.0	459.7	451.4	444.1	436.9	429.6	422.7	414.9	407.6
10°	500.5	490.7	479.8	467.4	456.0	445.1	435.2	425.4	415.0	406.0	396.2
12.5°	516.1	502.8	490.0	473.4	459.2	445.3	432.0	419.1	407.9	395.5	384.8
15°	524.3	511.9	498.0	478.8	459.7	443.7	428.8	412.9	399.2	386.0	374.3
17.5°	529.1	516.0	499.9	481.3	460.8	440.9	422.0	405.1	389.4	374.3	361.3
20°	527.0	514.4	497.8	480.2	457.9	436.9	416.1	396.9	378.9	362.7	348.7
22.5°	521.8	508.7	492.8	474.0	453.1	430.5	407.9	387.1	368.1	351.2	335.5
25°	516.7	498.9	482.5	464.3	444.2	422.2	399.2	376.6	356.5	339.4	322.7
27.5°	511.7	490.2	469.9	452.4	430.9	411.0	388.5	365.2	344.2	326.9	309.9
30°	504.4	479.5	456.5	436.0	415.9	397.2	376.2	353.6	331.9	314.0	296.5
32.5°	495.3	468.4	442.6	418.3	399.0	380.5	362.0	340.7	319.6	301.0	283.2
35°	488.0	454.2	426.8	401.7	380.2	362.2	345.1	327.7	306.5	287.3	270.0
37.5°	477.9	440.7	409.7	382.3	359.9	342.1	328.4	311.8	292.1	273.4	257.4
40°	468.8	425.7	391.0	364.0	340.1	321.1	308.4	294.9	277.3	260.0	244.0
42.5°	456.7	412.0	372.2	343.7	319.6	301.5	288.7	277.3	263.2	247.2	229.8
45°	440.1	393.5	352.8	322.5	298.3	280.3	268.4	257.9	246.7	231.7	216.8
47.5°	420.4	375.9	333.0	299.7	276.4	259.5	247.7	239.0	230.8	217.8	202.7
50°	395.6	353.1	311.5	279.4	254.2	238.3	227.5	220.9	213.6	202.0	189.9
52.5°	366.5	329.6	289.0	256.1	232.6	218.0	207.7	201.1	195.4	186.5	175.1
55°	335.5	302.2	264.8	235.1	213.2	198.3	188.3	182.1	178.5	170.5	161.4
57.5°	300.4	274.8	241.0	212.0	192.2	177.3	169.8	164.3	160.2	154.3	147.5
60°	263.4	246.7	217.1	189.9	172.1	158.0	151.5	147.0	143.3	138.5	133.5
62.5°	225.9	214.8	190.1	167.7	151.6	140.4	134.4	130.5	126.0	123.2	118.4
65°	193.1	182.3	164.5	146.1	131.0	121.6	117.1	113.6	110.9	107.3	103.9
67.5°	156.8	151.8	138.6	124.9	113.9	104.8	100.9	98.1	95.0	92.9	90.4
70°	123.9	121.7	113.0	104.7	94.5	88.8	85.3	84.2	80.3	78.1	76.5
72.5°	94.7	94.0	89.9	84.7	78.3	73.5	70.3	69.1	66.9	65.3	64.4
75°	68.9	69.2	68.3	64.6	61.9	58.7	55.9	55.2	53.4	52.0	51.1
77.5°	47.0	48.8	48.4	48.2	47.0	44.7	43.4	42.9	40.9	40.4	40.2
80°	29.9	31.9	33.6	33.5	33.1	32.6	31.7	31.1	30.3	29.7	29.4
82.5°	17.4	19.2	20.6	21.9	21.9	21.4	20.8	20.6	20.6	20.3	20.3
85°	9.4	9.8	10.3	11.6	12.5	12.6	12.5	12.3	11.7	11.9	12.1
87.5°	4.1	4.1	4.3	4.3	4.1	5.0	5.5	5.7	5.3	5.0	4.6
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: P242923

CATALOG NUMBER: S125RDRP-S375D930-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6
2.5°	424.5	422.0	420.2	416.6	414.2	413.1	411.1	410.6	412.6	411.1	411.0
5°	413.6	408.5	404.4	400.3	395.8	393.0	388.7	388.0	386.9	385.3	385.0
7.5°	401.0	394.6	389.8	383.0	377.5	373.0	367.7	365.6	364.5	362.5	359.3
10°	388.2	380.2	373.0	366.3	359.0	353.1	347.8	343.7	341.0	338.5	337.4
12.5°	375.5	367.3	357.7	349.2	340.8	334.1	328.0	325.7	322.7	319.6	316.8
15°	362.4	351.5	341.5	332.1	325.2	318.0	312.4	308.4	304.0	302.7	297.9
17.5°	348.3	338.2	326.4	316.3	308.4	301.0	294.7	290.1	286.7	281.9	279.6
20°	335.3	322.7	311.3	302.2	293.3	284.1	277.6	273.9	270.7	267.0	265.2
22.5°	321.4	309.1	297.4	286.4	277.3	268.2	264.1	260.2	256.5	253.1	250.6
25°	307.9	295.4	283.2	272.1	262.7	256.1	250.8	246.3	244.4	241.0	238.5
27.5°	294.4	281.2	268.7	257.2	249.9	243.3	239.0	235.5	231.7	228.7	226.4
30°	281.4	267.9	254.0	245.3	237.4	231.2	226.4	223.0	220.3	217.7	216.1
32.5°	268.4	254.3	242.4	232.8	225.5	220.3	215.4	212.2	209.3	206.3	204.3
35°	254.3	240.1	230.1	220.9	213.6	208.6	205.2	200.6	198.3	196.1	194.2
37.5°	241.7	228.2	217.1	209.1	202.4	197.6	193.1	190.8	187.8	186.0	184.4
40°	227.5	215.4	205.6	197.0	192.4	186.9	182.8	179.6	177.4	175.0	173.2
42.5°	214.6	203.6	194.2	186.7	180.6	176.2	172.3	169.1	166.2	164.6	163.2
45°	202.7	191.5	182.3	175.1	169.8	165.3	161.2	159.6	156.1	154.0	153.2
47.5°	190.3	180.1	171.0	164.5	158.9	154.8	150.9	147.4	145.6	143.5	142.4
50°	177.6	168.0	159.6	153.2	147.9	143.3	139.7	137.6	134.9	133.0	131.5
52.5°	165.0	156.3	147.9	141.8	137.4	132.8	128.7	126.5	124.1	123.0	122.1
55°	153.1	143.6	136.5	130.5	125.7	121.4	117.6	115.5	113.9	112.7	112.3
57.5°	139.4	131.7	124.9	119.6	114.4	110.3	107.0	105.0	103.6	103.4	102.2
60°	126.0	119.2	113.2	107.3	103.0	99.3	96.5	94.2	92.7	92.5	92.2
62.5°	112.7	106.3	100.7	95.8	92.0	88.5	85.8	83.1	82.4	81.3	80.4
65°	99.5	93.6	89.0	84.9	80.8	77.8	75.1	73.5	71.5	70.5	68.5
67.5°	86.5	81.7	77.2	73.9	70.5	67.5	65.1	62.8	61.4	60.5	58.9
70°	73.7	70.1	65.7	61.9	59.4	57.1	55.4	52.7	51.8	51.1	50.4
72.5°	61.6	58.6	55.0	52.1	49.7	47.5	45.4	44.5	43.6	42.9	42.5
75°	50.4	47.3	44.1	42.0	40.2	38.4	37.4	36.5	36.1	36.0	35.2
77.5°	39.2	37.4	34.7	32.7	31.5	30.8	29.7	29.4	29.5	28.7	28.5
80°	28.3	27.4	25.3	24.6	23.7	23.0	22.4	21.5	20.6	20.3	19.8
82.5°	19.2	18.3	17.8	16.6	15.8	15.5	15.0	14.8	15.1	14.6	14.4
85°	11.2	10.3	10.0	9.8	9.4	9.8	9.6	9.4	9.3	9.1	9.3
87.5°	4.4	4.4	4.3	4.6	4.1	4.3	4.3	4.1	4.1	4.1	3.9
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: P242923

CATALOG NUMBER: S125RDRP-S375D930-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	433.6	433.6	433.6	433.6
2.5°	410.8	408.8	408.3	409.0
5°	383.2	381.4	382.3	381.9
7.5°	359.9	357.6	354.9	355.6
10°	335.1	333.4	332.3	333.2
12.5°	314.3	313.4	312.5	311.8
15°	295.8	293.7	292.8	290.5
17.5°	278.0	277.3	275.0	273.4
20°	262.5	261.8	259.5	260.9
22.5°	249.7	247.9	247.6	246.7
25°	237.8	235.5	234.6	233.5
27.5°	225.7	224.4	223.2	222.8
30°	213.9	212.7	211.8	211.8
32.5°	203.4	202.5	201.6	201.5
35°	193.3	191.9	191.5	190.4
37.5°	182.6	181.4	181.4	181.5
40°	172.5	171.6	171.4	170.1
42.5°	161.6	161.2	160.5	160.2
45°	152.0	150.7	150.7	149.9
47.5°	141.8	140.8	141.0	139.9
50°	131.7	131.2	131.0	130.6
52.5°	121.6	121.4	122.3	121.4
55°	112.7	112.1	113.2	112.1
57.5°	102.2	101.8	102.9	102.2
60°	91.8	90.8	91.3	91.5
62.5°	79.6	79.0	79.4	78.3
65°	68.2	67.6	66.9	66.6
67.5°	59.3	57.7	57.7	58.0
70°	49.3	49.3	49.1	49.1
72.5°	42.4	42.2	41.8	41.6
75°	35.2	35.4	35.1	34.9
77.5°	27.6	26.7	27.1	26.7
80°	19.8	19.6	20.1	19.6
82.5°	14.6	14.4	14.6	14.2
85°	9.4	9.3	9.1	9.3
87.5°	4.1	3.9	3.9	3.9
90°	0.0	0.0	0.0	0.0



TEST NUMBER: P242923  
 CATALOG NUMBER: S125RDRP-S375D930-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	13.53	15.07	13.90	15.38	15.70	14.51	16.05	14.88	16.36	16.68
	3H	14.66	16.04	15.04	16.37	16.73	15.99	17.37	16.37	17.69	18.06
	4H	15.05	16.34	15.45	16.69	17.06	16.50	17.79	16.90	18.14	18.52
	6H	15.28	16.47	15.69	16.84	17.23	16.85	18.04	17.26	18.41	18.80
	8H	15.34	16.47	15.76	16.86	17.26	16.95	18.08	17.38	18.47	18.88
	12H	15.37	16.45	15.80	16.84	17.27	17.00	18.09	17.43	18.47	18.90
4H	2H	15.12	16.41	15.52	16.76	17.14	15.36	16.65	15.76	17.00	17.38
	3H	16.19	17.26	16.60	17.66	18.06	17.02	18.09	17.43	18.49	18.89
	4H	16.57	17.54	17.01	17.95	18.39	17.61	18.57	18.04	18.99	19.43
	6H	16.83	17.67	17.29	18.11	18.57	18.04	18.87	18.49	19.32	19.78
	8H	16.89	17.67	17.36	18.12	18.59	18.16	18.94	18.62	19.38	19.85
	12H	16.94	17.64	17.42	18.11	18.58	18.24	18.94	18.72	19.42	19.89
8H	4H	16.95	17.73	17.41	18.17	18.64	17.76	18.54	18.22	18.98	19.45
	6H	17.25	17.90	17.75	18.39	18.87	18.27	18.92	18.77	19.41	19.89
	8H	17.35	17.93	17.86	18.44	18.92	18.45	19.03	18.96	19.54	20.02
	12H	17.43	17.94	17.94	18.43	19.00	18.58	19.10	19.09	19.59	20.15
12H	4H	16.97	17.67	17.46	18.15	18.62	17.75	18.44	18.23	18.92	19.39
	6H	17.29	17.87	17.80	18.38	18.86	18.26	18.85	18.78	19.35	19.84
	8H	17.42	17.93	17.93	18.42	18.99	18.48	18.99	18.99	19.48	20.05