

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: P242928

Luminaire Tested: S125RDRP-S375D935-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2024  
Report Number: P242928  
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-S375D935-X4F0-XX-UDD-A-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

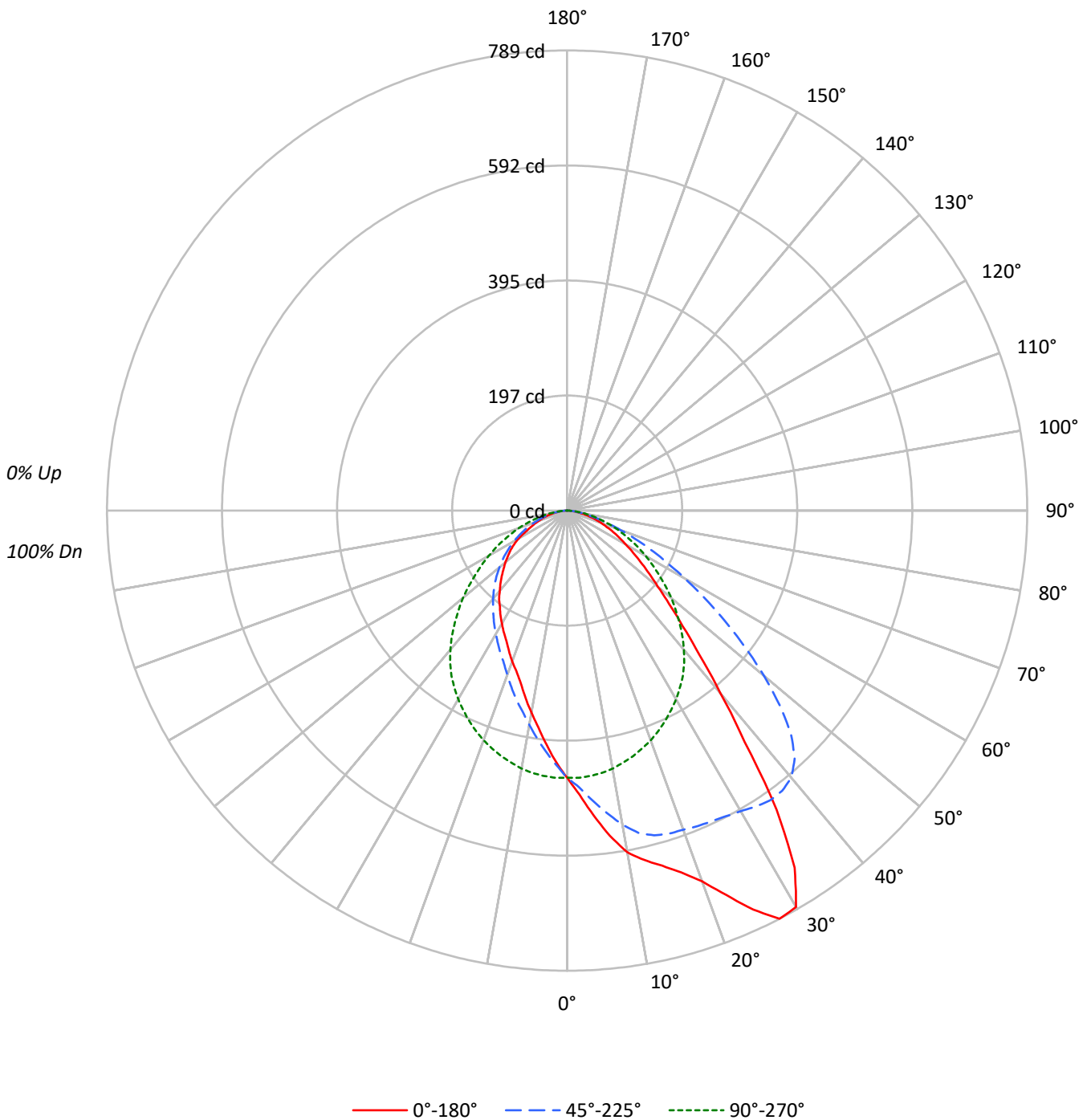
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1186.3 lumens  
Efficiency: N/A  
Efficacy: 102.3 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 (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

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### Luminous Intensity Polar Plot



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**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°	3254	3254	3254	3254	3254
5°	3744	3559	3258	2961	2878
10°	4295	3947	3242	2691	2540
15°	4639	4242	3209	2472	2257
20°	5115	4404	3170	2269	2084
25°	5919	4606	3119	2121	1934
30°	6442	4884	3065	2004	1836
35°	5434	5264	3002	1911	1745
40°	3795	5549	2889	1831	1667
45°	2815	5460	2737	1755	1591
50°	2245	4865	2580	1673	1526
55°	1905	4085	2383	1589	1467
60°	1646	3311	2208	1491	1373
65°	1466	2642	2016	1381	1182
70°	1288	2026	1847	1253	1079
75°	1115	1513	1601	1115	1011
80°	847	1085	1347	990	847
85°	701	767	1060	840	799

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 5460 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.9	3.7
10°-20°	128.7	10.9
20°-30°	204.1	17.2
30°-40°	246.6	20.8
40°-50°	219.6	18.5
50°-60°	168.4	14.2
60°-70°	109.4	9.2
70°-80°	53.1	4.5
80°-90°	12.5	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°	376.7	31.8
0°-40°	623.4	52.5
0°-60°	1011.4	85.3
0°-90°	1186.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1186.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	458	458	458	458	458	
5°	525	499	457	415	403	52
15°	630	576	436	336	307	180
25°	755	587	398	270	247	347
35°	626	607	346	220	201	380
45°	280	543	272	175	158	222
55°	154	330	192	128	118	139
65°	87	157	120	82	70	87
75°	41	55	58	41	37	43
85°	9	9	13	10	10	10
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9
2.5°	487.6	487.2	487.9	485.9	486.1	482.9	482.9	480.4	477.2	474.8	473.6
5°	524.8	525.1	524.4	521.6	519.7	516.9	513.7	508.0	503.3	498.8	495.3
7.5°	562.7	563.1	560.7	560.1	555.2	552.2	545.1	537.7	531.3	522.9	516.9
10°	595.1	594.9	592.2	590.2	586.0	580.8	573.8	564.8	556.3	546.9	537.9
12.5°	613.9	613.3	612.9	610.3	606.5	602.0	596.4	587.5	576.6	566.1	555.2
15°	630.4	629.1	626.6	623.4	618.0	612.5	606.0	598.1	588.1	576.5	566.7
17.5°	650.3	650.5	646.8	643.4	636.2	627.2	617.4	605.4	592.6	580.8	571.0
20°	676.3	675.7	671.9	663.3	654.8	642.8	631.2	615.6	599.0	582.3	569.3
22.5°	713.5	711.8	707.8	695.8	681.5	665.2	645.8	625.9	605.0	585.5	567.4
25°	754.8	753.7	746.0	732.8	714.4	690.5	667.2	641.1	612.4	587.4	566.7
27.5°	789.0	786.8	779.8	767.4	749.4	723.6	691.5	657.7	623.4	590.6	562.2
30°	784.9	787.7	787.0	781.9	769.1	746.6	717.4	678.1	635.5	595.1	559.5
32.5°	725.9	728.3	736.8	750.5	754.6	749.0	729.1	693.6	649.0	601.6	557.5
35°	626.3	629.6	642.4	662.5	688.9	710.8	715.4	695.8	656.2	606.7	555.4
37.5°	499.6	521.6	530.2	550.7	592.1	632.1	666.9	674.8	653.3	605.6	553.0
40°	409.0	413.5	432.7	456.5	490.0	532.1	587.5	627.6	628.9	598.1	545.1
42.5°	335.3	341.3	353.0	370.8	398.3	440.4	498.1	554.1	584.4	577.4	534.7
45°	280.1	284.4	294.0	308.6	330.6	365.4	414.6	475.7	524.2	543.2	514.6
47.5°	236.8	239.1	247.9	259.8	276.7	303.0	343.0	398.3	456.0	494.5	487.0
50°	203.0	205.6	212.0	220.5	234.2	255.6	286.1	330.2	390.2	440.0	450.0
52.5°	176.7	178.7	182.1	190.0	200.7	216.0	239.1	278.0	330.4	384.2	410.5
55°	153.7	155.3	158.4	163.0	172.0	183.8	205.1	232.7	276.3	329.7	363.5
57.5°	134.2	135.0	136.8	141.3	147.9	156.8	172.9	198.1	229.7	279.9	317.1
60°	115.8	116.5	119.2	122.0	126.9	134.8	146.8	163.1	193.2	232.9	270.7
62.5°	101.1	101.5	102.2	105.1	109.2	114.8	123.7	136.3	158.6	192.3	227.4
65°	87.2	87.4	87.8	90.0	92.7	97.2	103.4	112.8	130.8	157.1	188.7
67.5°	73.3	73.7	75.0	75.7	78.9	81.2	85.1	92.7	106.6	125.4	150.9
70°	62.0	61.8	63.2	64.1	65.0	67.9	70.3	76.1	84.0	97.5	118.0
72.5°	51.5	50.9	51.3	51.5	52.8	54.5	57.0	60.0	65.6	73.9	88.3
75°	40.6	40.8	40.8	41.2	42.1	42.9	43.6	45.5	48.9	55.1	63.5
77.5°	30.4	30.1	31.0	31.0	31.8	32.7	33.3	34.0	35.3	38.2	43.2
80°	20.7	20.7	20.9	21.4	21.2	21.6	22.6	23.3	25.0	26.5	28.0
82.5°	14.7	14.5	14.7	14.7	14.7	15.0	15.2	15.2	15.6	16.2	17.1
85°	8.6	8.6	8.8	8.8	9.0	9.0	9.2	9.2	9.2	9.4	9.6
87.5°	4.1	3.9	3.8	3.8	3.9	4.3	4.1	3.9	3.9	3.9	4.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9
2.5°	473.6	472.3	469.9	467.6	464.8	462.4	460.7	458.6	456.0	452.8	450.2
5°	491.3	487.2	481.7	477.0	471.0	466.3	461.4	456.7	452.0	446.0	440.8
7.5°	510.9	502.8	495.3	485.5	476.7	468.9	461.4	453.7	446.4	438.1	430.4
10°	528.5	518.2	506.7	493.6	481.5	470.1	459.6	449.2	438.3	428.7	418.4
12.5°	545.1	531.0	517.4	500.0	484.9	470.3	456.2	442.6	430.8	417.6	406.4
15°	553.7	540.6	525.9	505.6	485.5	468.6	452.8	436.1	421.6	407.7	395.3
17.5°	558.8	544.9	528.0	508.2	486.6	465.6	445.6	427.8	411.2	395.3	381.5
20°	556.5	543.2	525.7	507.1	483.6	461.4	439.4	419.1	400.2	383.1	368.2
22.5°	551.1	537.2	520.4	500.5	478.5	454.7	430.8	408.8	388.7	370.8	354.3
25°	545.6	526.8	509.5	490.4	469.1	445.8	421.6	397.7	376.5	358.4	340.8
27.5°	540.4	517.6	496.2	477.8	455.0	434.0	410.3	385.7	363.5	345.3	327.2
30°	532.7	506.4	482.1	460.5	439.3	419.5	397.3	373.5	350.5	331.6	313.1
32.5°	523.1	494.7	467.4	441.7	421.4	401.8	382.3	359.7	337.6	317.8	299.0
35°	515.4	479.7	450.7	424.2	401.5	382.5	364.4	346.0	323.7	303.4	285.1
37.5°	504.7	465.4	432.7	403.7	380.0	361.2	346.8	329.3	308.4	288.7	271.8
40°	495.1	449.6	412.9	384.4	359.2	339.1	325.7	311.4	292.8	274.6	257.7
42.5°	482.3	435.1	393.0	362.9	337.6	318.4	304.9	292.8	278.0	261.1	242.7
45°	464.8	415.6	372.5	340.6	315.0	296.0	283.4	272.3	260.5	244.7	228.9
47.5°	444.0	397.0	351.7	316.5	291.9	274.0	261.6	252.4	243.8	230.1	214.1
50°	417.8	372.9	328.9	295.1	268.4	251.7	240.2	233.3	225.5	213.3	200.5
52.5°	387.0	348.1	305.2	270.5	245.7	230.2	219.3	212.4	206.4	197.0	184.9
55°	354.3	319.1	279.7	248.3	225.2	209.4	198.9	192.3	188.5	180.1	170.5
57.5°	317.3	290.2	254.5	223.9	203.0	187.2	179.3	173.5	169.2	163.0	155.8
60°	278.2	260.5	229.3	200.5	181.8	166.9	159.9	155.3	151.3	146.2	141.0
62.5°	238.5	226.9	200.7	177.1	160.1	148.3	141.9	137.8	133.1	130.1	125.0
65°	203.9	192.5	173.7	154.3	138.3	128.4	123.7	119.9	117.1	113.3	109.8
67.5°	165.6	160.3	146.4	131.9	120.3	110.7	106.6	103.6	100.4	98.1	95.5
70°	130.8	128.6	119.4	110.5	99.8	93.8	90.0	88.9	84.8	82.5	80.8
72.5°	100.0	99.2	94.9	89.5	82.7	77.6	74.2	72.9	70.7	69.0	68.0
75°	72.7	73.1	72.2	68.2	65.4	62.0	59.0	58.3	56.4	54.9	53.9
77.5°	49.6	51.5	51.1	50.9	49.6	47.2	45.9	45.3	43.2	42.7	42.5
80°	31.6	33.6	35.5	35.3	35.0	34.4	33.5	32.9	32.0	31.4	31.0
82.5°	18.4	20.3	21.8	23.1	23.1	22.6	22.0	21.8	21.8	21.4	21.4
85°	10.0	10.3	10.9	12.2	13.2	13.3	13.2	13.0	12.4	12.6	12.8
87.5°	4.3	4.3	4.5	4.5	4.3	5.3	5.8	6.0	5.6	5.3	4.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9
2.5°	448.3	445.6	443.8	440.0	437.4	436.2	434.2	433.6	435.7	434.2	434.0
5°	436.8	431.4	427.0	422.7	418.0	415.0	410.5	409.7	408.6	406.9	406.5
7.5°	423.5	416.7	411.6	404.5	398.7	394.0	388.3	386.1	384.9	382.9	379.5
10°	409.9	401.5	394.0	386.8	379.1	372.9	367.3	362.9	360.1	357.5	356.4
12.5°	396.6	387.9	377.8	368.8	359.9	352.8	346.4	344.0	340.8	337.6	334.6
15°	382.7	371.2	360.7	350.7	343.4	335.9	329.9	325.7	321.0	319.7	314.6
17.5°	367.8	357.1	344.7	334.0	325.7	317.8	311.3	306.4	302.8	297.7	295.3
20°	354.1	340.8	328.7	319.1	309.8	300.0	293.2	289.3	285.9	281.9	280.1
22.5°	339.4	326.5	314.1	302.4	292.8	283.2	278.9	274.8	270.8	267.3	264.6
25°	325.2	312.0	299.0	287.4	277.4	270.5	264.8	260.1	258.1	254.5	251.9
27.5°	310.9	297.0	283.8	271.6	263.9	256.9	252.4	248.7	244.7	241.5	239.1
30°	297.2	282.9	268.2	259.0	250.7	244.2	239.1	235.5	232.7	229.9	228.2
32.5°	283.4	268.6	256.0	245.8	238.1	232.7	227.4	224.0	221.0	217.8	215.8
35°	268.6	253.6	243.0	233.3	225.5	220.3	216.7	211.8	209.4	207.1	205.1
37.5°	255.2	241.0	229.3	220.8	213.7	208.6	203.9	201.5	198.3	196.4	194.7
40°	240.2	227.4	217.1	208.1	203.2	197.4	193.0	189.6	187.4	184.8	182.9
42.5°	226.7	215.0	205.1	197.2	190.8	186.1	181.9	178.6	175.6	173.9	172.4
45°	214.1	202.2	192.5	184.9	179.3	174.6	170.3	168.6	164.8	162.6	161.8
47.5°	200.9	190.2	180.6	173.7	167.8	163.5	159.4	155.6	153.7	151.5	150.4
50°	187.6	177.4	168.6	161.8	156.2	151.3	147.5	145.3	142.5	140.4	138.9
52.5°	174.2	165.0	156.2	149.8	145.1	140.2	135.9	133.6	131.0	129.9	128.9
55°	161.6	151.7	144.2	137.8	132.7	128.2	124.2	122.0	120.3	119.0	118.6
57.5°	147.2	139.1	131.9	126.3	120.9	116.5	113.0	110.9	109.4	109.2	107.9
60°	133.1	125.9	119.5	113.3	108.8	104.9	101.9	99.4	97.9	97.7	97.4
62.5°	119.0	112.2	106.4	101.1	97.2	93.4	90.6	87.8	87.0	85.9	85.0
65°	105.1	98.9	94.0	89.7	85.3	82.1	79.3	77.6	75.6	74.4	72.4
67.5°	91.3	86.3	81.6	78.0	74.4	71.2	68.8	66.3	64.8	63.9	62.2
70°	77.8	74.1	69.4	65.4	62.8	60.3	58.5	55.6	54.7	53.9	53.2
72.5°	65.0	61.8	58.1	55.1	52.4	50.2	47.9	47.0	46.0	45.3	44.9
75°	53.2	50.0	46.6	44.4	42.5	40.6	39.5	38.5	38.2	38.0	37.2
77.5°	41.4	39.5	36.7	34.6	33.3	32.5	31.4	31.0	31.2	30.3	30.1
80°	29.9	28.9	26.7	25.9	25.0	24.2	23.7	22.7	21.8	21.4	20.9
82.5°	20.3	19.4	18.8	17.5	16.7	16.4	15.8	15.6	16.0	15.4	15.2
85°	11.8	10.9	10.5	10.3	10.0	10.3	10.1	10.0	9.8	9.6	9.8
87.5°	4.7	4.7	4.5	4.9	4.3	4.5	4.5	4.3	4.3	4.3	4.1
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: P242928

CATALOG NUMBER: S125RDRP-S375D935-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	457.9	457.9	457.9	457.9
2.5°	433.8	431.7	431.2	431.9
5°	404.7	402.8	403.7	403.4
7.5°	380.0	377.6	374.8	375.5
10°	353.9	352.0	350.9	351.9
12.5°	331.9	331.0	330.0	329.3
15°	312.4	310.1	309.2	306.7
17.5°	293.6	292.8	290.4	288.7
20°	277.2	276.5	274.0	275.5
22.5°	263.7	261.8	261.4	260.5
25°	251.1	248.7	247.7	246.6
27.5°	238.3	237.0	235.7	235.3
30°	225.9	224.6	223.7	223.7
32.5°	214.8	213.9	213.0	212.8
35°	204.1	202.6	202.2	201.1
37.5°	192.8	191.5	191.5	191.7
40°	182.1	181.2	181.0	179.7
42.5°	170.7	170.3	169.5	169.2
45°	160.5	159.2	159.2	158.3
47.5°	149.8	148.7	148.9	147.7
50°	139.1	138.5	138.3	138.0
52.5°	128.4	128.2	129.1	128.2
55°	119.0	118.4	119.5	118.4
57.5°	107.9	107.5	108.6	107.9
60°	97.0	95.9	96.4	96.6
62.5°	84.0	83.5	83.8	82.7
65°	72.0	71.4	70.7	70.3
67.5°	62.6	60.9	60.9	61.3
70°	52.1	52.1	51.9	51.9
72.5°	44.7	44.5	44.2	44.0
75°	37.2	37.4	37.0	36.8
77.5°	29.1	28.2	28.6	28.2
80°	20.9	20.7	21.2	20.7
82.5°	15.4	15.2	15.4	15.0
85°	10.0	9.8	9.6	9.8
87.5°	4.3	4.1	4.1	4.1
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P242928

CATALOG NUMBER: S125RDRP-S375D935-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	13.72	15.26	14.09	15.57	15.89	14.70	16.24	15.07	16.55	16.87
	3H	14.85	16.23	15.23	16.56	16.92	16.18	17.56	16.56	17.88	18.25
	4H	15.24	16.53	15.64	16.88	17.25	16.69	17.98	17.09	18.33	18.71
	6H	15.47	16.66	15.88	17.03	17.42	17.04	18.23	17.45	18.60	18.99
	8H	15.52	16.66	15.95	17.05	17.45	17.14	18.27	17.57	18.66	19.07
	12H	15.56	16.64	15.99	17.03	17.45	17.20	18.28	17.63	18.66	19.09
4H	2H	15.31	16.60	15.71	16.95	17.33	15.55	16.84	15.95	17.19	17.57
	3H	16.38	17.45	16.79	17.85	18.25	17.21	18.28	17.62	18.68	19.08
	4H	16.76	17.73	17.20	18.14	18.58	17.80	18.76	18.23	19.18	19.61
	6H	17.02	17.86	17.48	18.30	18.76	18.23	19.06	18.68	19.51	19.97
	8H	17.08	17.86	17.54	18.31	18.77	18.35	19.13	18.81	19.57	20.04
	12H	17.13	17.82	17.61	18.30	18.77	18.43	19.13	18.91	19.61	20.08
8H	4H	17.14	17.92	17.60	18.36	18.83	17.95	18.73	18.41	19.17	19.64
	6H	17.44	18.09	17.94	18.58	19.06	18.46	19.11	18.96	19.60	20.08
	8H	17.54	18.11	18.05	18.62	19.11	18.64	19.22	19.15	19.73	20.21
	12H	17.61	18.13	18.12	18.62	19.18	18.77	19.29	19.28	19.78	20.34
12H	4H	17.16	17.86	17.64	18.34	18.81	17.94	18.63	18.42	19.11	19.58
	6H	17.48	18.06	17.99	18.57	19.05	18.45	19.03	18.97	19.54	20.03
	8H	17.61	18.12	18.12	18.61	19.18	18.67	19.18	19.18	19.67	20.24