

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: P243680

Luminaire Tested: S125DRP-H375D930-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243680
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-61)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-H375D930-X4F0-XX-UDD-A-W
Description: DEFINE 5 DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

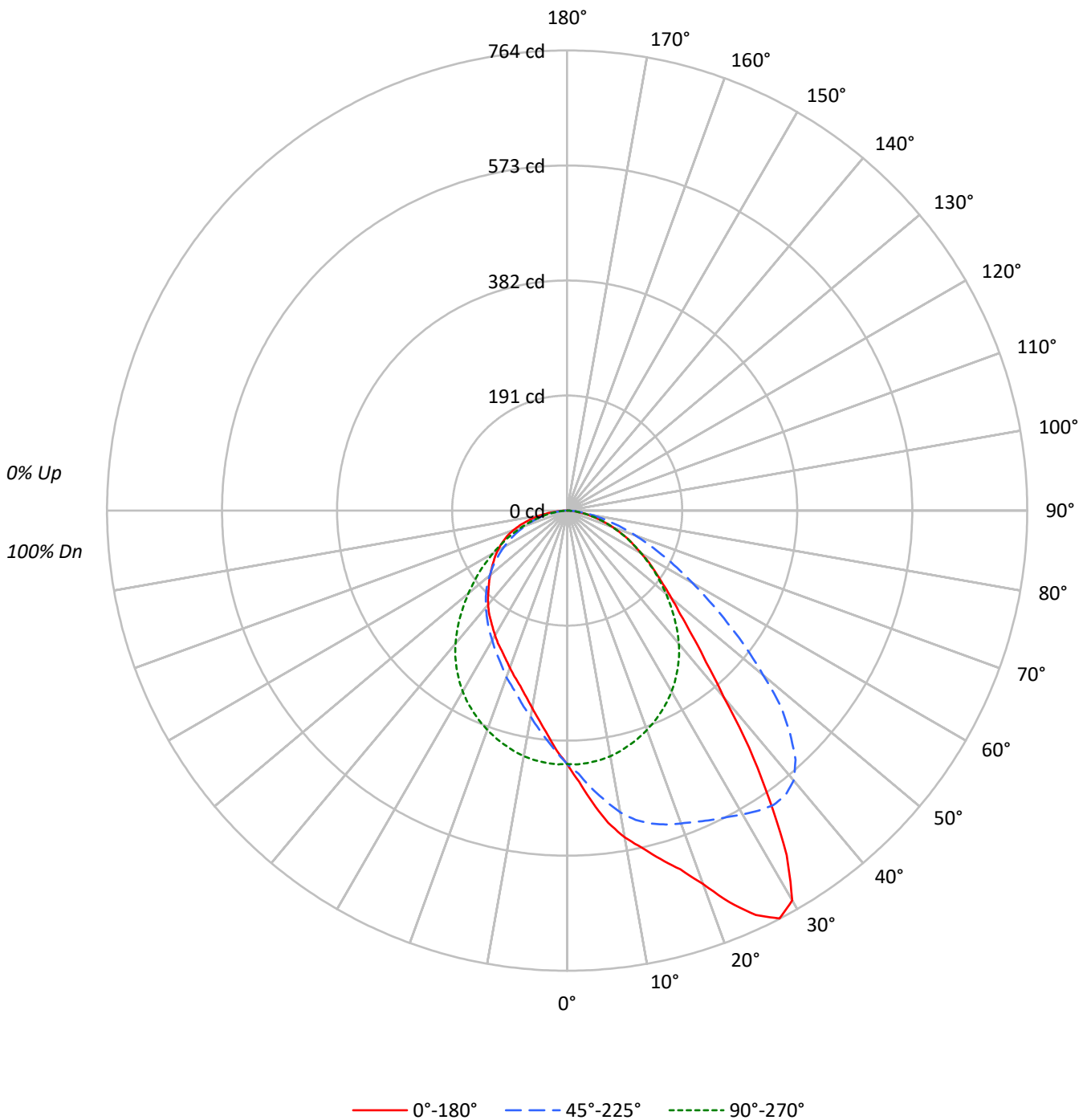
Lumens per Lamp: N/A
Luminaire Lumens: 1199.4 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.22 / 1.53
Luminous Opening: Rectangular (W 3.88' x L: 0.39' x H: 0')
CIE Type: Direct

Input Watts (W): 11.2
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: P243680

CATALOG NUMBER: S125DRP-H375D930-X4F0-XX-UDD-A-W

Luminous Intensity Polar Plot



TEST NUMBER: P243680

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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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	63	61					61			
4	84	73	64	58	82	71	63	57	69	62	56	66	61	56	64	59	55	53					53			
5	78	65	56	50	75	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	40					40			
7	67	53	45	39	65	53	44	39	51	44	38	50	43	38	48	42	38	36					36			
8	62	49	40	35	60	48	40	35	47	40	34	46	39	34	44	38	34	32					32			
9	58	45	37	31	57	44	36	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°	2991	2991	2991	2991	2991
5°	3474	3300	2997	2728	2664
10°	3976	3673	2988	2512	2404
15°	4407	3958	2961	2342	2215
20°	4990	4180	2931	2227	2101
25°	5811	4444	2893	2113	2013
30°	6134	4780	2846	2042	1963
35°	5072	5178	2776	1990	1922
40°	3752	5428	2676	1947	1894
45°	2950	5259	2530	1909	1852
50°	2498	4696	2366	1856	1845
55°	2224	4023	2203	1798	1852
60°	2018	3410	2023	1724	1892
65°	1872	2916	1853	1636	1946
70°	1681	2494	1660	1527	1958
75°	1433	2109	1458	1398	1930
80°	1175	1703	1195	1216	1801
85°	807	1199	848	962	1533

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5259 cd/sqm



TEST NUMBER: P243680

CATALOG NUMBER: S125DRP-H375D930-X4F0-XX-UDD-A-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.6	3.4
10°-20°	121.5	10.1
20°-30°	197.5	16.5
30°-40°	240.3	20.0
40°-50°	219.9	18.3
50°-60°	176.0	14.7
60°-70°	122.5	10.2
70°-80°	65.1	5.4
80°-90°	16.0	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°	359.6	30.0
0°-40°	599.9	50.0
0°-60°	995.7	83.0
0°-90°	1199.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1199.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	421	421	421	421	421	
5°	487	462	420	382	373	48
15°	599	538	402	318	301	172
25°	741	567	369	270	257	338
35°	585	597	320	229	222	362
45°	294	523	252	190	184	231
55°	180	325	178	145	150	162
65°	111	173	110	97	116	110
75°	52	77	53	51	70	56
85°	10	15	10	12	19	13
90°	0	0	0	0	0	



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CATALOG NUMBER: S125DRP-H375D930-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	420.8	420.8	420.8	420.8	420.8	420.8	420.8	420.8	420.8	420.8	420.8
2.5°	450.5	448.6	448.1	448.3	447.3	446.4	444.4	441.6	439.8	437.4	436.7
5°	487.0	482.4	483.3	481.9	479.7	476.8	474.2	470.1	466.2	462.5	457.5
7.5°	522.9	522.0	519.6	519.3	515.7	510.7	505.6	500.0	491.6	485.8	479.2
10°	550.9	552.6	549.1	549.3	543.0	538.1	533.6	526.3	516.9	509.0	499.3
12.5°	573.4	574.1	573.5	571.3	567.2	558.9	554.6	546.9	536.7	525.9	518.4
15°	599.0	597.1	594.2	591.5	585.5	579.5	570.6	561.6	548.6	537.9	527.0
17.5°	624.6	624.2	620.6	614.8	607.3	599.5	586.2	574.6	560.7	546.6	532.9
20°	659.7	657.8	652.6	645.9	632.1	621.0	604.4	588.6	570.5	552.7	536.9
22.5°	703.8	697.6	692.3	682.1	666.2	646.9	628.3	605.3	580.0	559.2	539.4
25°	741.0	738.2	732.6	721.2	703.1	679.9	652.2	626.1	594.4	566.7	541.0
27.5°	763.5	762.3	758.9	748.1	733.1	710.1	680.5	647.3	611.3	573.9	543.0
30°	747.4	747.6	749.5	748.3	741.6	726.8	700.5	667.1	625.4	582.4	543.5
32.5°	678.5	683.1	697.8	704.8	714.2	717.2	705.5	677.6	637.4	591.0	545.2
35°	584.6	595.9	605.8	626.3	650.7	670.6	682.3	673.2	642.3	596.8	546.1
37.5°	496.2	495.4	510.7	532.9	558.9	592.8	625.8	643.9	633.8	595.6	544.5
40°	404.4	412.3	421.8	441.5	471.8	513.7	552.9	591.6	605.6	585.0	538.6
42.5°	341.6	345.2	354.8	370.1	392.0	434.6	473.4	523.2	559.0	561.4	525.4
45°	293.5	297.4	300.2	315.4	335.7	364.3	404.1	454.3	502.4	523.2	504.1
47.5°	254.9	257.2	263.1	272.4	285.7	311.1	342.8	388.4	440.8	481.2	474.7
50°	225.9	227.6	232.4	237.5	248.5	267.2	292.8	330.2	380.5	424.7	439.2
52.5°	200.3	202.6	204.9	209.9	220.0	232.6	253.4	282.6	329.4	374.6	397.6
55°	179.5	180.4	182.9	186.7	194.4	203.9	220.5	246.9	279.7	324.7	356.5
57.5°	161.4	160.6	163.3	165.9	171.0	179.0	191.0	210.6	241.8	280.2	313.3
60°	142.0	142.8	144.9	146.9	150.5	157.5	166.9	182.6	205.5	239.9	273.7
62.5°	125.3	125.9	126.5	129.4	132.6	137.5	145.2	158.0	177.0	205.5	235.7
65°	111.3	110.1	110.8	112.8	115.4	119.5	126.6	136.0	150.2	173.4	198.5
67.5°	94.9	95.2	95.4	96.6	98.8	102.7	107.8	115.5	127.1	145.4	167.4
70°	80.9	81.1	81.2	82.3	84.1	86.3	89.9	95.9	105.8	120.0	137.2
72.5°	66.6	67.2	67.2	68.1	69.5	70.6	74.1	79.0	86.5	97.8	112.3
75°	52.2	53.4	53.8	54.8	56.0	56.3	58.9	62.8	67.6	76.8	88.2
77.5°	40.6	40.6	41.3	42.5	42.5	43.5	46.2	48.0	51.7	58.0	66.7
80°	28.7	29.2	29.2	29.5	30.2	31.1	32.3	33.8	37.0	41.6	46.2
82.5°	18.8	18.9	19.1	20.0	19.6	20.5	21.0	22.9	24.4	26.6	29.5
85°	9.9	9.9	10.1	10.6	11.1	11.3	11.6	12.5	13.7	14.7	16.4
87.5°	4.1	3.9	3.9	4.3	4.3	4.4	4.6	4.9	5.6	5.6	6.3
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: P243680

CATALOG NUMBER: S125DRP-H375D930-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	420.8	420.8	420.8	420.8	420.8	420.8	420.8	420.8	420.8	420.8	420.8
2.5°	436.2	434.8	432.4	430.4	427.8	425.9	424.1	421.7	419.3	416.7	414.0
5°	453.6	449.5	444.9	440.3	434.8	430.4	425.6	420.1	415.5	410.4	404.9
7.5°	473.5	466.4	458.4	449.3	440.8	433.1	425.3	417.7	410.9	403.2	395.7
10°	492.8	480.4	470.3	458.0	445.9	434.6	423.9	414.0	404.1	394.5	385.3
12.5°	506.0	491.8	479.2	465.0	450.9	436.7	422.5	408.9	397.1	385.5	375.8
15°	515.0	505.1	488.4	471.3	452.7	434.3	418.3	402.4	388.4	374.9	363.3
17.5°	520.6	507.8	491.5	473.5	453.1	433.8	414.5	395.6	379.5	365.0	351.9
20°	522.2	507.2	490.1	471.5	451.0	429.9	408.2	387.5	370.1	353.6	340.3
22.5°	520.6	503.2	485.0	466.9	445.4	423.9	401.2	378.7	358.7	341.6	327.6
25°	518.1	497.1	478.0	456.7	436.7	416.2	392.8	368.9	348.1	330.4	314.7
27.5°	514.8	490.8	467.2	446.2	424.6	404.4	382.9	358.5	336.9	317.4	302.7
30°	511.1	482.4	456.3	431.4	410.9	390.8	369.8	346.8	324.9	306.3	290.4
32.5°	506.8	473.5	442.8	416.0	394.2	375.6	356.0	334.0	312.5	292.5	278.7
35°	500.9	461.4	428.3	399.3	376.6	356.5	339.2	320.0	298.6	280.0	265.7
37.5°	493.9	450.7	413.7	382.3	357.5	336.9	321.0	305.3	285.3	267.4	253.6
40°	484.5	437.7	398.1	364.2	337.7	317.4	301.9	288.4	271.8	253.8	241.3
42.5°	472.2	423.4	380.5	344.4	318.8	297.1	282.6	270.3	256.1	240.4	228.2
45°	458.2	407.0	360.9	325.4	297.6	277.0	262.8	251.7	241.0	227.0	215.5
47.5°	436.3	387.7	343.2	303.9	276.6	256.7	243.3	232.8	224.7	213.7	202.4
50°	410.4	365.9	322.2	282.8	255.1	235.8	223.2	214.0	207.2	198.6	190.1
52.5°	381.9	341.3	299.1	262.3	234.6	216.4	203.1	194.9	190.4	183.6	177.0
55°	348.6	313.7	274.4	240.8	213.7	195.1	183.6	177.8	172.9	169.5	163.5
57.5°	315.2	285.7	250.7	217.4	192.5	175.9	165.7	159.2	155.6	153.2	149.0
60°	278.7	255.5	223.4	194.5	172.4	156.7	147.6	142.3	139.1	137.7	134.8
62.5°	243.9	226.1	196.9	172.9	153.1	139.2	130.2	125.9	123.9	122.4	120.6
65°	209.6	195.6	172.5	150.0	133.3	120.8	113.7	110.2	108.7	107.0	106.8
67.5°	178.7	165.9	147.4	129.0	115.0	104.4	98.1	94.7	93.0	93.2	92.3
70°	148.3	138.4	123.4	108.4	96.4	88.1	82.1	79.9	79.2	79.0	78.3
72.5°	120.0	114.3	101.2	88.6	79.2	72.7	67.9	66.0	65.2	64.8	64.8
75°	95.1	91.0	79.7	70.1	63.0	57.7	54.4	53.1	51.9	52.6	52.0
77.5°	71.3	67.9	60.2	53.4	48.0	43.5	42.0	40.8	40.1	39.9	40.6
80°	50.2	48.1	43.3	37.9	33.8	31.2	30.2	29.2	28.7	28.3	28.7
82.5°	32.3	31.1	27.6	24.4	22.0	20.6	19.6	19.1	18.3	18.4	18.8
85°	17.6	17.2	15.0	14.0	11.8	11.6	10.9	10.4	10.6	10.2	10.8
87.5°	7.2	6.8	6.3	5.8	5.1	4.6	4.3	4.6	4.1	4.6	4.4
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: P243680

CATALOG NUMBER: S125DRP-H375D930-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	420.8	420.8	420.8	420.8	420.8	420.8	420.8	420.8	420.8	420.8	420.8
2.5°	412.6	410.7	408.5	406.5	403.4	401.4	400.3	400.7	399.5	399.1	399.0
5°	401.7	397.4	393.3	389.9	386.3	382.3	379.4	378.5	378.2	377.3	375.4
7.5°	390.4	385.0	379.7	374.7	369.6	364.8	361.9	359.6	358.2	355.8	355.3
10°	378.5	371.8	366.2	359.0	352.9	348.0	344.2	342.1	341.0	338.7	336.9
12.5°	367.1	360.1	351.4	344.9	338.4	333.3	329.0	325.6	324.7	321.8	320.3
15°	354.8	346.2	338.4	330.9	324.7	318.3	315.7	312.6	309.6	307.0	306.5
17.5°	343.0	332.8	325.1	317.7	310.2	305.5	302.0	300.0	297.6	296.2	293.9
20°	328.8	320.5	311.9	305.1	298.6	294.5	289.9	288.1	286.3	283.1	282.1
22.5°	316.9	306.8	299.7	292.8	287.0	281.2	278.0	276.1	273.5	271.8	270.5
25°	304.4	296.1	287.0	280.2	275.3	269.5	267.2	264.8	262.6	261.1	259.7
27.5°	292.3	283.1	275.8	268.9	263.8	259.7	256.7	254.1	252.6	251.4	250.5
30°	279.7	271.2	264.3	258.0	252.2	248.8	245.9	244.9	243.2	242.3	241.0
32.5°	268.3	259.6	253.1	247.6	242.5	239.1	237.4	235.8	234.1	232.6	232.4
35°	255.3	247.8	241.8	235.8	232.1	229.4	227.5	225.9	224.6	223.4	222.7
37.5°	243.9	236.7	230.0	225.8	221.7	219.3	217.2	216.7	215.4	215.5	214.5
40°	231.6	225.1	219.5	215.2	212.5	209.9	208.5	206.8	206.0	206.1	205.3
42.5°	219.6	213.7	208.5	204.6	201.7	199.8	198.6	197.3	196.2	195.6	195.4
45°	207.5	202.2	198.0	194.0	191.6	189.9	188.4	186.7	185.8	185.5	185.3
47.5°	195.6	190.8	186.2	183.4	181.2	179.7	178.2	176.8	176.1	175.6	174.7
50°	183.3	178.5	175.3	171.8	170.0	167.9	166.2	165.5	164.7	164.5	165.4
52.5°	170.5	166.7	163.8	161.1	158.9	156.7	154.9	154.1	154.6	154.6	155.6
55°	158.4	154.4	151.7	149.5	147.1	145.1	143.3	143.3	143.3	144.4	145.7
57.5°	144.9	141.5	139.4	136.9	134.6	133.3	132.1	131.9	132.6	134.3	135.8
60°	131.2	128.8	126.6	124.6	122.4	121.3	121.2	120.8	121.8	123.5	126.8
62.5°	117.7	116.2	113.5	112.5	110.6	109.4	109.4	109.7	111.3	114.0	116.9
65°	104.8	102.6	100.5	99.5	98.3	97.3	97.3	98.6	100.9	103.4	107.0
67.5°	91.5	89.6	88.2	87.2	85.8	85.3	85.8	87.4	90.1	92.7	96.4
70°	77.1	76.8	75.6	74.2	73.5	73.5	74.1	75.8	77.8	81.7	85.0
72.5°	64.0	64.0	63.3	62.5	61.9	62.5	62.8	64.5	67.1	70.5	74.1
75°	52.0	51.5	51.0	50.7	50.5	50.9	51.4	52.7	55.8	59.0	61.9
77.5°	40.3	39.9	39.4	39.8	39.8	39.9	41.5	43.0	44.7	47.3	50.3
80°	29.0	29.2	28.7	28.5	29.4	29.7	30.9	32.1	33.3	36.2	38.4
82.5°	19.1	19.5	19.3	19.6	20.0	20.0	21.3	22.5	23.5	25.6	27.3
85°	10.9	11.1	11.1	11.6	11.9	11.8	13.0	13.7	14.2	15.7	16.7
87.5°	4.8	4.9	5.1	5.1	5.1	5.8	6.0	6.3	6.5	6.8	7.3
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: P243680

CATALOG NUMBER: S125DRP-H375D930-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	420.8	420.8	420.8	420.8
2.5°	397.4	397.3	398.1	398.6
5°	374.2	373.7	373.0	373.4
7.5°	353.6	352.2	351.9	351.9
10°	335.3	334.0	333.6	333.1
12.5°	319.8	317.7	316.9	316.0
15°	305.1	304.8	302.9	301.0
17.5°	291.6	292.1	290.3	289.4
20°	280.4	278.8	278.2	277.8
22.5°	268.9	267.7	267.7	266.6
25°	258.7	257.7	257.8	256.7
27.5°	249.1	249.0	248.8	248.5
30°	240.3	239.6	238.9	239.2
32.5°	231.7	230.7	230.2	230.0
35°	222.9	222.5	221.8	221.5
37.5°	214.2	214.3	213.5	213.3
40°	204.8	204.6	204.4	204.1
42.5°	194.9	194.4	194.7	194.5
45°	185.0	184.5	184.8	184.3
47.5°	175.3	175.6	175.6	175.8
50°	165.7	166.4	166.4	166.9
52.5°	156.8	158.2	158.2	158.0
55°	147.3	148.8	149.3	149.5
57.5°	138.2	139.8	141.3	141.6
60°	128.5	131.2	132.8	133.1
62.5°	119.8	122.4	124.4	124.6
65°	110.1	113.1	115.0	115.7
67.5°	100.2	102.6	105.1	106.1
70°	88.9	91.8	93.5	94.2
72.5°	77.1	80.4	82.6	82.9
75°	65.9	68.3	70.0	70.3
77.5°	53.1	55.5	57.0	57.3
80°	40.3	42.3	43.3	44.0
82.5°	28.5	29.9	30.4	31.1
85°	17.6	18.6	18.8	18.8
87.5°	7.7	7.8	7.8	8.2
90°	0.0	0.0	0.0	0.0



TEST NUMBER: P243680
 CATALOG NUMBER: S125DRP-H375D930-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	14.64	16.21	15.01	16.53	16.84	14.38	15.95	14.75	16.27	16.58
	3H	16.00	17.41	16.37	17.74	18.10	15.81	17.22	16.19	17.55	17.91
	4H	16.48	17.80	16.87	18.15	18.53	16.30	17.62	16.69	17.97	18.35
	6H	16.78	18.01	17.20	18.38	18.77	16.61	17.84	17.02	18.20	18.60
	8H	16.86	18.03	17.29	18.42	18.82	16.69	17.86	17.12	18.25	18.65
	12H	16.89	18.02	17.32	18.40	18.83	16.73	17.85	17.16	18.23	18.66
4H	2H	16.03	17.36	16.43	17.71	18.08	15.45	16.77	15.85	17.12	17.50
	3H	17.39	18.50	17.80	18.89	19.29	17.10	18.21	17.51	18.61	19.01
	4H	17.89	18.89	18.33	19.30	19.74	17.66	18.66	18.09	19.07	19.51
	6H	18.25	19.11	18.70	19.56	20.01	18.04	18.91	18.50	19.35	19.81
	8H	18.34	19.15	18.80	19.59	20.06	18.14	18.95	18.60	19.39	19.86
	12H	18.39	19.11	18.87	19.59	20.06	18.19	18.92	18.67	19.40	19.87
8H	4H	18.35	19.16	18.81	19.60	20.07	18.02	18.83	18.48	19.27	19.74
	6H	18.78	19.45	19.27	19.94	20.42	18.52	19.19	19.01	19.68	20.16
	8H	18.91	19.51	19.42	20.02	20.50	18.66	19.27	19.18	19.78	20.26
	12H	18.99	19.53	19.50	20.02	20.58	18.76	19.30	19.27	19.79	20.35
12H	4H	18.39	19.12	18.87	19.59	20.06	18.04	18.76	18.52	19.24	19.71
	6H	18.85	19.45	19.36	19.96	20.45	18.57	19.17	19.08	19.68	20.16
	8H	19.02	19.56	19.53	20.05	20.61	18.77	19.30	19.28	19.79	20.36