

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: P243685

Luminaire Tested: S125DRP-H375D935-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243685
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-H375D935-X4F0-XX-UDD-A-W
Description: DEFINE 5 DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

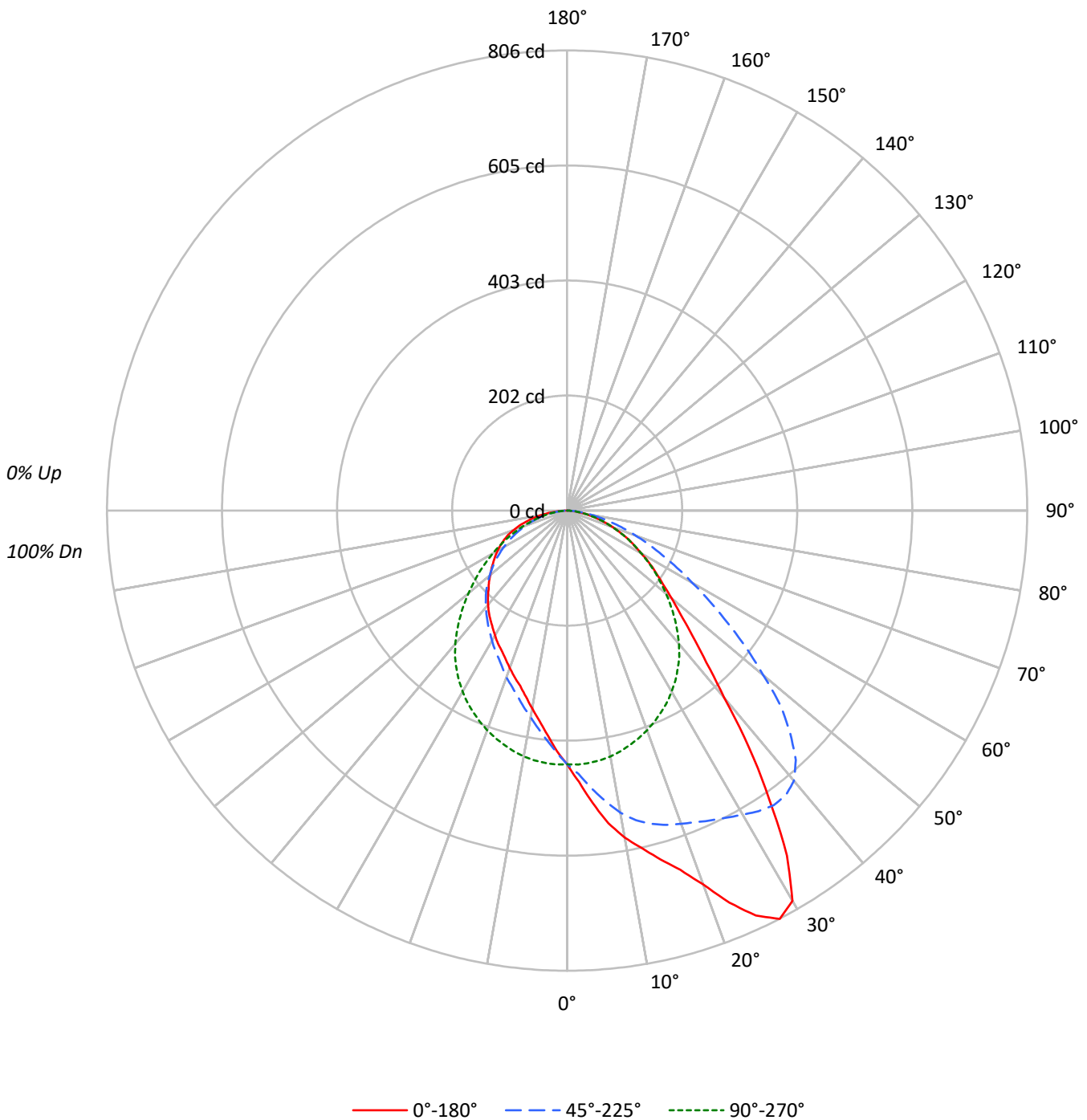
Lumens per Lamp: N/A
Luminaire Lumens: 1266.6 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.22 / 1.53
Luminous Opening: Rectangular (W 3.88' x L: 0.39' x H: 0')
CIE Type: Direct

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

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CATALOG NUMBER: S125DRP-H375D935-X4F0-XX-UDD-A-W

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	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°	3159	3159	3159	3159	3159
5°	3669	3484	3166	2880	2813
10°	4198	3880	3155	2652	2539
15°	4654	4179	3126	2473	2339
20°	5269	4415	3096	2352	2219
25°	6136	4693	3055	2232	2125
30°	6478	5048	3005	2157	2074
35°	5357	5468	2932	2101	2029
40°	3963	5732	2826	2057	1999
45°	3116	5553	2672	2016	1956
50°	2638	4960	2499	1960	1948
55°	2349	4249	2327	1898	1957
60°	2131	3602	2136	1821	1999
65°	1976	3079	1958	1727	2055
70°	1775	2633	1752	1615	2068
75°	1513	2227	1538	1475	2038
80°	1240	1801	1261	1285	1903
85°	856	1264	897	1011	1615

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5553 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	3.4
10°-20°	128.3	10.1
20°-30°	208.6	16.5
30°-40°	253.7	20.0
40°-50°	232.2	18.3
50°-60°	185.8	14.7
60°-70°	129.4	10.2
70°-80°	68.8	5.4
80°-90°	16.9	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°	379.8	30.0
0°-40°	633.5	50.0
0°-60°	1051.5	83.0
0°-90°	1266.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1266.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	444	444	444	444	444	
5°	514	488	444	404	394	51
15°	632	568	425	336	318	181
25°	782	598	390	285	271	357
35°	617	630	338	242	234	383
45°	310	552	266	201	195	244
55°	190	343	188	153	158	171
65°	118	183	116	103	122	116
75°	55	81	56	54	74	60
85°	10	16	11	12	20	14
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°	444.4	444.4	444.4	444.4	444.4	444.4	444.4	444.4	444.4	444.4	444.4
2.5°	475.8	473.8	473.2	473.4	472.3	471.4	469.3	466.4	464.4	461.9	461.2
5°	514.3	509.5	510.4	508.9	506.6	503.5	500.8	496.5	492.3	488.4	483.2
7.5°	552.2	551.3	548.8	548.4	544.6	539.4	534.0	528.0	519.2	513.1	506.0
10°	581.7	583.5	579.9	580.1	573.4	568.2	563.5	555.8	545.9	537.6	527.3
12.5°	605.5	606.2	605.7	603.4	599.0	590.2	585.7	577.6	566.8	555.4	547.5
15°	632.5	630.6	627.5	624.6	618.3	612.0	602.6	593.1	579.4	568.0	556.5
17.5°	659.6	659.2	655.4	649.3	641.4	633.1	619.0	606.8	592.2	577.2	562.8
20°	696.7	694.7	689.1	682.1	667.5	655.8	638.3	621.6	602.5	583.7	567.0
22.5°	743.2	736.7	731.1	720.3	703.6	683.2	663.5	639.2	612.5	590.6	569.7
25°	782.5	779.6	773.7	761.6	742.5	718.0	688.8	661.2	627.7	598.5	571.3
27.5°	806.3	805.0	801.4	790.1	774.2	749.9	718.7	683.5	645.5	606.1	573.4
30°	789.3	789.5	791.5	790.2	783.2	767.5	739.8	704.5	660.5	615.1	574.0
32.5°	716.5	721.4	736.9	744.3	754.2	757.4	745.0	715.6	673.1	624.1	575.8
35°	617.4	629.3	639.8	661.4	687.2	708.2	720.5	710.9	678.3	630.2	576.7
37.5°	524.1	523.2	539.4	562.8	590.2	626.1	660.8	679.9	669.3	628.9	575.1
40°	427.1	435.4	445.5	466.2	498.3	542.4	583.9	624.8	639.6	617.8	568.8
42.5°	360.8	364.6	374.7	390.9	414.0	459.0	499.9	552.5	590.4	592.9	554.9
45°	310.0	314.1	317.0	333.0	354.5	384.8	426.7	479.7	530.5	552.5	532.4
47.5°	269.2	271.6	277.9	287.6	301.7	328.5	362.0	410.2	465.5	508.2	501.4
50°	238.6	240.4	245.5	250.9	262.4	282.2	309.2	348.7	401.9	448.6	463.9
52.5°	211.6	213.9	216.4	221.7	232.3	245.6	267.6	298.4	347.8	395.6	419.9
55°	189.6	190.5	193.2	197.2	205.3	215.4	232.8	260.8	295.4	342.9	376.5
57.5°	170.5	169.6	172.5	175.2	180.6	189.0	201.7	222.4	255.4	295.9	330.9
60°	149.9	150.8	153.0	155.2	158.9	166.3	176.2	192.8	217.0	253.4	289.1
62.5°	132.3	133.0	133.5	136.6	140.0	145.3	153.4	166.9	186.9	217.0	248.9
65°	117.5	116.2	117.0	119.1	121.8	126.1	133.7	143.6	158.6	183.1	209.6
67.5°	100.2	100.6	100.7	102.0	104.3	108.5	113.9	122.0	134.3	153.5	176.8
70°	85.4	85.6	85.8	86.9	88.8	91.2	95.0	101.3	111.7	126.7	144.9
72.5°	70.3	71.0	71.0	71.9	73.3	74.6	78.2	83.4	91.4	103.3	118.6
75°	55.1	56.4	56.8	57.8	59.1	59.5	62.2	66.3	71.4	81.1	93.2
77.5°	42.9	42.9	43.6	44.9	44.9	46.0	48.8	50.6	54.6	61.3	70.5
80°	30.3	30.8	30.8	31.2	31.9	32.8	34.1	35.7	39.1	44.0	48.8
82.5°	19.8	20.0	20.2	21.1	20.7	21.6	22.2	24.1	25.8	28.1	31.2
85°	10.5	10.5	10.6	11.2	11.7	11.9	12.3	13.2	14.4	15.5	17.3
87.5°	4.3	4.1	4.1	4.5	4.5	4.7	4.9	5.2	5.9	5.9	6.7
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°	444.4	444.4	444.4	444.4	444.4	444.4	444.4	444.4	444.4	444.4	444.4
2.5°	460.6	459.2	456.7	454.5	451.8	449.8	447.8	445.3	442.8	440.1	437.2
5°	479.0	474.7	469.8	465.0	459.2	454.5	449.5	443.7	438.8	433.4	427.6
7.5°	500.1	492.5	484.1	474.5	465.5	457.4	449.1	441.2	434.0	425.8	417.9
10°	520.5	507.3	496.7	483.7	470.9	459.0	447.7	437.2	426.7	416.7	406.9
12.5°	534.3	519.4	506.0	491.1	476.1	461.2	446.2	431.8	419.4	407.1	396.8
15°	543.9	533.4	515.8	497.7	478.1	458.6	441.7	424.9	410.2	395.9	383.7
17.5°	549.8	536.3	519.0	500.1	478.5	458.1	437.7	417.7	400.8	385.5	371.6
20°	551.5	535.6	517.6	497.9	476.3	454.0	431.1	409.3	390.9	373.4	359.3
22.5°	549.8	531.4	512.2	493.1	470.4	447.7	423.7	399.9	378.8	360.8	346.0
25°	547.1	525.0	504.8	482.3	461.2	439.5	414.9	389.6	367.6	348.9	332.3
27.5°	543.7	518.3	493.4	471.3	448.4	427.1	404.4	378.6	355.7	335.2	319.7
30°	539.7	509.5	481.9	455.6	434.0	412.7	390.5	366.2	343.1	323.5	306.7
32.5°	535.2	500.1	467.7	439.4	416.3	396.6	375.9	352.7	330.0	308.9	294.3
35°	528.9	487.3	452.3	421.7	397.7	376.5	358.3	337.9	315.4	295.7	280.6
37.5°	521.5	475.9	436.8	403.7	377.5	355.7	339.0	322.4	301.3	282.4	267.8
40°	511.6	462.2	420.4	384.6	356.6	335.2	318.8	304.6	287.1	268.0	254.8
42.5°	498.7	447.1	401.9	363.7	336.6	313.8	298.4	285.5	270.5	253.9	240.9
45°	483.9	429.8	381.2	343.7	314.3	292.5	277.5	265.8	254.5	239.7	227.6
47.5°	460.8	409.4	362.4	321.0	292.1	271.0	257.0	245.8	237.3	225.6	213.7
50°	433.4	386.4	340.2	298.6	269.4	249.1	235.7	226.0	218.8	209.8	200.8
52.5°	403.3	360.4	315.9	277.0	247.8	228.5	214.5	205.8	201.1	193.9	186.9
55°	368.2	331.2	289.8	254.3	225.6	206.0	193.9	187.8	182.6	179.0	172.6
57.5°	332.9	301.7	264.7	229.6	203.3	185.8	175.0	168.1	164.4	161.8	157.3
60°	294.3	269.8	235.9	205.4	182.0	165.4	155.9	150.3	146.9	145.4	142.4
62.5°	257.5	238.8	208.0	182.6	161.7	147.1	137.5	133.0	130.8	129.2	127.4
65°	221.3	206.5	182.2	158.4	140.7	127.6	120.0	116.4	114.8	113.0	112.8
67.5°	188.7	175.2	155.7	136.2	121.5	110.3	103.6	100.0	98.2	98.4	97.5
70°	156.6	146.2	130.3	114.4	101.8	93.0	86.7	84.3	83.6	83.4	82.7
72.5°	126.7	120.7	106.9	93.5	83.6	76.8	71.7	69.7	68.8	68.5	68.5
75°	100.4	96.1	84.2	74.1	66.5	60.9	57.5	56.0	54.8	55.5	55.0
77.5°	75.3	71.7	63.6	56.4	50.6	46.0	44.3	43.1	42.4	42.2	42.9
80°	53.0	50.8	45.8	40.0	35.7	33.0	31.9	30.8	30.3	29.9	30.3
82.5°	34.1	32.8	29.2	25.8	23.2	21.8	20.7	20.2	19.3	19.5	19.8
85°	18.6	18.2	15.9	14.8	12.4	12.3	11.5	11.0	11.2	10.8	11.4
87.5°	7.6	7.2	6.7	6.1	5.4	4.9	4.5	4.9	4.3	4.9	4.7
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°	444.4	444.4	444.4	444.4	444.4	444.4	444.4	444.4	444.4	444.4	444.4
2.5°	435.8	433.8	431.4	429.3	426.0	423.9	422.8	423.1	421.9	421.5	421.3
5°	424.2	419.7	415.4	411.8	408.0	403.7	400.6	399.7	399.4	398.5	396.5
7.5°	412.3	406.6	401.0	395.7	390.3	385.3	382.2	379.7	378.3	375.7	375.2
10°	399.7	392.7	386.7	379.2	372.7	367.5	363.5	361.3	360.1	357.7	355.7
12.5°	387.6	380.3	371.1	364.2	357.4	352.0	347.5	343.8	342.9	339.9	338.3
15°	374.7	365.7	357.4	349.4	342.9	336.1	333.4	330.2	326.9	324.2	323.7
17.5°	362.2	351.4	343.3	335.6	327.6	322.6	319.0	316.8	314.3	312.9	310.3
20°	347.3	338.4	329.4	322.2	315.4	311.0	306.2	304.2	302.4	299.0	297.9
22.5°	334.7	324.0	316.5	309.2	303.1	297.0	293.6	291.6	288.9	287.1	285.6
25°	321.5	312.7	303.1	295.9	290.7	284.6	282.2	279.7	277.3	275.7	274.3
27.5°	308.7	299.0	291.2	284.0	278.6	274.3	271.0	268.3	266.7	265.5	264.6
30°	295.4	286.4	279.2	272.5	266.4	262.8	259.7	258.6	256.8	255.9	254.5
32.5°	283.3	274.1	267.3	261.5	256.1	252.5	250.7	249.1	247.3	245.6	245.5
35°	269.6	261.7	255.4	249.1	245.1	242.2	240.2	238.6	237.2	235.9	235.2
37.5°	257.5	250.0	242.9	238.4	234.1	231.6	229.4	228.9	227.4	227.6	226.5
40°	244.5	237.7	231.8	227.2	224.4	221.7	220.2	218.4	217.5	217.7	216.8
42.5°	231.9	225.6	220.2	216.1	213.0	211.0	209.8	208.3	207.2	206.5	206.3
45°	219.1	213.6	209.0	204.9	202.4	200.6	199.0	197.2	196.3	195.9	195.7
47.5°	206.5	201.5	196.6	193.7	191.4	189.8	188.1	186.7	186.0	185.4	184.5
50°	193.5	188.5	185.1	181.5	179.5	177.3	175.5	174.8	173.9	173.7	174.6
52.5°	180.0	176.1	173.0	170.1	167.8	165.4	163.6	162.7	163.3	163.3	164.4
55°	167.2	163.1	160.2	157.9	155.3	153.2	151.4	151.4	151.4	152.5	153.9
57.5°	153.0	149.4	147.2	144.5	142.2	140.7	139.5	139.3	140.0	141.8	143.4
60°	138.6	136.1	133.7	131.6	129.2	128.1	128.0	127.6	128.7	130.5	133.9
62.5°	124.3	122.7	119.8	118.8	116.8	115.5	115.5	115.9	117.5	120.4	123.4
65°	110.7	108.3	106.1	105.1	103.8	102.7	102.7	104.2	106.5	109.2	113.0
67.5°	96.6	94.6	93.2	92.1	90.6	90.1	90.6	92.3	95.2	97.9	101.8
70°	81.5	81.1	79.8	78.4	77.7	77.7	78.2	80.0	82.2	86.3	89.7
72.5°	67.6	67.6	66.9	66.0	65.4	66.0	66.3	68.1	70.8	74.4	78.2
75°	55.0	54.4	53.9	53.5	53.3	53.7	54.2	55.7	58.9	62.4	65.4
77.5°	42.5	42.2	41.6	42.0	42.0	42.2	43.8	45.4	47.2	49.9	53.2
80°	30.6	30.8	30.3	30.1	31.0	31.4	32.6	33.9	35.1	38.2	40.5
82.5°	20.2	20.5	20.4	20.7	21.1	21.1	22.5	23.8	24.9	27.0	28.8
85°	11.5	11.7	11.7	12.3	12.6	12.4	13.7	14.4	15.0	16.6	17.7
87.5°	5.0	5.2	5.4	5.4	5.4	6.1	6.3	6.7	6.8	7.2	7.7
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: P243685

CATALOG NUMBER: S125DRP-H375D935-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	444.4	444.4	444.4	444.4
2.5°	419.7	419.5	420.4	421.0
5°	395.2	394.7	393.9	394.3
7.5°	373.4	372.0	371.6	371.6
10°	354.1	352.7	352.3	351.8
12.5°	337.7	335.6	334.7	333.8
15°	322.2	321.9	319.9	317.9
17.5°	308.0	308.5	306.5	305.6
20°	296.1	294.5	293.7	293.4
22.5°	284.0	282.8	282.8	281.5
25°	273.2	272.1	272.3	271.0
27.5°	263.1	262.9	262.8	262.4
30°	253.7	253.0	252.3	252.7
32.5°	244.7	243.6	243.1	242.9
35°	235.4	235.0	234.3	233.9
37.5°	226.2	226.3	225.4	225.3
40°	216.3	216.1	215.9	215.5
42.5°	205.8	205.3	205.6	205.4
45°	195.4	194.8	195.2	194.6
47.5°	185.1	185.4	185.4	185.6
50°	175.0	175.7	175.7	176.2
52.5°	165.6	167.1	167.1	166.9
55°	155.5	157.1	157.7	157.9
57.5°	146.0	147.6	149.2	149.6
60°	135.7	138.6	140.2	140.6
62.5°	126.5	129.2	131.4	131.6
65°	116.2	119.5	121.5	122.2
67.5°	105.8	108.3	111.0	112.1
70°	93.9	97.0	98.8	99.5
72.5°	81.5	84.9	87.2	87.6
75°	69.6	72.1	73.9	74.2
77.5°	56.0	58.6	60.2	60.6
80°	42.5	44.7	45.8	46.5
82.5°	30.1	31.5	32.1	32.8
85°	18.6	19.6	19.8	19.8
87.5°	8.1	8.3	8.3	8.7
90°	0.0	0.0	0.0	0.0



TEST NUMBER: P243685
 CATALOG NUMBER: S125DRP-H375D935-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	14.83	16.40	15.20	16.72	17.03	14.57	16.14	14.94	16.46	16.77
	3H	16.19	17.60	16.56	17.93	18.29	16.00	17.41	16.38	17.74	18.10
	4H	16.66	17.99	17.06	18.34	18.72	16.49	17.81	16.88	18.16	18.54
	6H	16.97	18.20	17.38	18.57	18.96	16.80	18.03	17.21	18.40	18.79
	8H	17.05	18.22	17.47	18.61	19.01	16.88	18.05	17.31	18.44	18.84
	12H	17.08	18.20	17.51	18.59	19.01	16.92	18.04	17.35	18.42	18.85
4H	2H	16.22	17.55	16.62	17.89	18.27	15.64	16.96	16.03	17.31	17.69
	3H	17.58	18.68	17.99	19.08	19.48	17.29	18.40	17.70	18.80	19.20
	4H	18.08	19.08	18.51	19.49	19.93	17.85	18.85	18.28	19.26	19.70
	6H	18.44	19.30	18.89	19.75	20.20	18.23	19.10	18.69	19.54	20.00
	8H	18.53	19.34	18.99	19.78	20.25	18.33	19.14	18.79	19.58	20.05
	12H	18.58	19.30	19.06	19.78	20.25	18.38	19.11	18.86	19.59	20.06
8H	4H	18.54	19.35	19.00	19.79	20.26	18.21	19.02	18.67	19.46	19.93
	6H	18.97	19.64	19.46	20.13	20.61	18.71	19.38	19.20	19.87	20.35
	8H	19.09	19.70	19.61	20.21	20.69	18.85	19.46	19.37	19.97	20.45
	12H	19.18	19.71	19.69	20.21	20.77	18.95	19.49	19.46	19.98	20.54
12H	4H	18.58	19.31	19.06	19.78	20.25	18.23	18.95	18.71	19.43	19.90
	6H	19.04	19.64	19.55	20.15	20.64	18.76	19.36	19.27	19.87	20.35
	8H	19.21	19.75	19.72	20.24	20.80	18.96	19.49	19.47	19.98	20.55