

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: P243783

Luminaire Tested: S125RDRP-H375D930-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243783
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-71)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H375D930-X4F0-XX-UDD-A-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

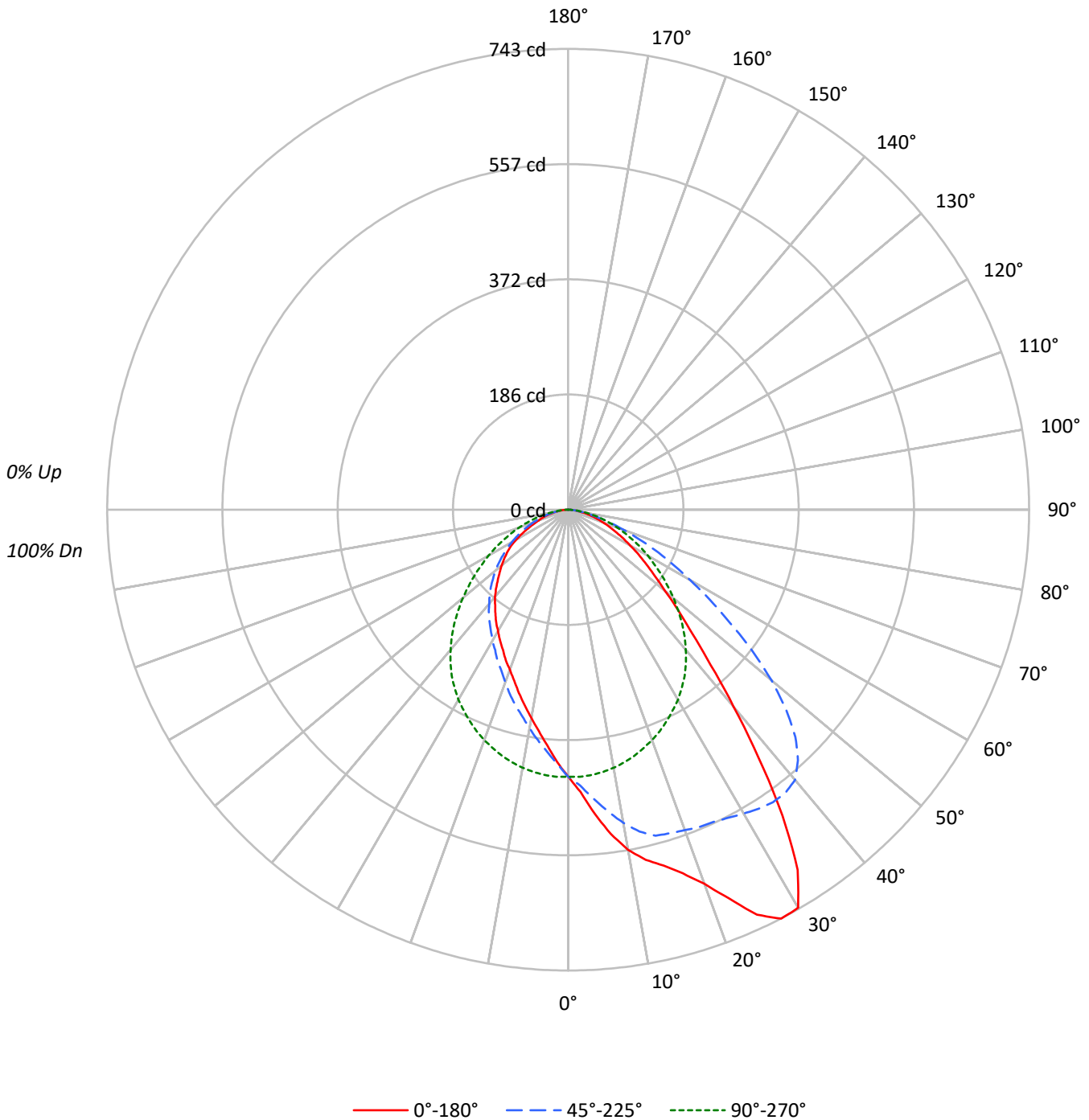
Lumens per Lamp: N/A
Luminaire Lumens: 1145.4 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Spacing Criteria (0/90/45): 1.42 / 1.22 / 1.5
Luminous Opening: Rectangular (W 3.88' x L: 0.39' x H: 0')
CIE Type: Direct

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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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	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	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	66	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	48				48
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33				33
9	59	46	38	32	57	45	38	32	44	37	32	43	37	32	42	36	32	30				30
10	55	42	35	29	54	42	34	29	41	34	29	40	34	29	39	33	29	27				27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3059	3059	3059	3059	3059
5°	3512	3336	3064	2793	2725
10°	4018	3701	3048	2585	2463
15°	4370	4004	3023	2407	2252
20°	4856	4158	2989	2240	2075
25°	5650	4355	2947	2112	1953
30°	6084	4643	2904	2002	1854
35°	5227	4994	2838	1916	1773
40°	3850	5277	2736	1838	1701
45°	2844	5206	2609	1770	1612
50°	2253	4725	2452	1696	1547
55°	1903	3944	2273	1592	1488
60°	1640	3221	2105	1494	1377
65°	1423	2600	1917	1372	1199
70°	1249	1976	1756	1241	1049
75°	1060	1439	1538	1096	994
80°	823	1040	1285	962	823
85°	726	767	1028	824	750

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5206 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.4	3.6
10°-20°	122.6	10.7
20°-30°	195.5	17.1
30°-40°	237.3	20.7
40°-50°	213.9	18.7
50°-60°	164.5	14.4
60°-70°	106.7	9.3
70°-80°	51.4	4.5
80°-90°	12.1	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°	359.5	31.4
0°-40°	596.8	52.1
0°-60°	975.2	85.1
0°-90°	1145.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1145.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	430	430	430	430	430	
5°	492	468	429	392	382	49
15°	594	544	411	327	306	170
25°	720	555	376	269	249	329
35°	602	576	327	221	204	368
45°	283	518	260	176	160	225
55°	154	318	183	128	120	139
65°	85	155	114	82	71	85
75°	39	52	56	40	36	42
85°	9	9	13	10	9	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°	430.4	430.4	430.4	430.4	430.4	430.4	430.4	430.4	430.4	430.4	430.4
2.5°	455.3	457.0	455.6	456.5	455.1	454.4	452.7	450.2	447.6	445.2	445.1
5°	492.2	491.8	490.4	488.6	487.2	483.8	482.1	476.3	472.4	467.6	465.2
7.5°	527.3	526.5	524.4	521.8	520.6	516.2	511.4	504.1	498.0	490.4	484.8
10°	556.7	556.5	554.9	553.2	548.6	543.7	539.1	531.4	522.2	512.8	504.9
12.5°	578.2	577.3	575.4	572.5	568.8	565.4	559.2	552.2	541.0	531.4	520.6
15°	593.9	593.5	590.8	589.8	582.4	577.6	569.5	562.5	553.8	544.2	532.6
17.5°	614.7	615.4	613.0	607.2	600.5	593.2	581.6	570.1	558.0	546.9	537.5
20°	642.0	640.3	636.2	629.2	617.2	608.2	596.6	582.4	566.0	549.7	536.2
22.5°	678.5	676.6	670.1	661.6	646.6	630.0	612.3	591.1	572.4	553.6	535.8
25°	720.5	716.9	707.3	698.1	676.8	659.2	632.8	607.5	580.2	555.3	535.3
27.5°	743.3	743.3	738.9	728.8	711.9	686.0	659.0	625.4	593.9	559.7	531.4
30°	741.3	740.1	741.8	737.5	726.6	707.2	680.4	645.1	604.8	565.7	531.7
32.5°	688.4	688.9	699.1	706.1	711.6	706.8	689.4	657.5	617.4	571.5	530.4
35°	602.4	603.8	621.8	633.8	658.2	672.2	676.3	659.0	623.0	575.6	528.0
37.5°	504.1	504.1	525.1	543.2	570.5	604.9	630.7	637.2	619.6	575.4	525.9
40°	415.0	414.5	431.1	453.2	482.4	520.5	558.9	591.8	596.1	568.8	518.8
42.5°	339.6	338.7	356.8	369.1	399.8	433.8	484.8	531.4	558.0	548.1	508.2
45°	282.9	282.3	294.0	308.0	329.7	365.0	407.9	459.6	504.3	517.9	488.4
47.5°	240.3	240.6	246.9	258.7	277.1	302.4	340.8	388.7	444.0	475.6	463.5
50°	203.8	204.9	209.7	218.6	232.1	252.4	285.3	328.7	385.5	427.3	429.9
52.5°	176.5	178.2	183.3	188.1	199.3	213.7	239.2	276.8	323.7	373.9	391.8
55°	153.6	154.4	157.3	162.5	170.8	182.8	201.4	230.0	273.5	318.3	349.8
57.5°	134.5	134.5	136.3	139.9	146.6	157.3	169.8	193.5	230.2	270.6	304.3
60°	115.4	116.0	117.4	121.3	125.8	134.0	146.1	161.1	192.8	226.6	262.8
62.5°	99.3	100.5	101.9	103.8	107.8	113.7	122.2	136.0	157.3	188.6	220.8
65°	84.6	85.8	86.0	88.2	91.0	95.7	102.2	112.3	130.0	154.6	181.2
67.5°	71.7	72.2	72.7	74.4	77.0	80.0	84.3	91.8	105.8	122.4	148.3
70°	60.1	60.4	60.6	62.5	63.7	66.4	68.6	73.4	82.3	95.1	115.2
72.5°	49.1	48.6	48.5	50.0	50.5	52.7	55.5	58.9	63.7	72.7	87.7
75°	38.6	38.7	38.9	39.8	39.9	41.0	42.7	44.9	47.1	52.4	61.9
77.5°	29.7	29.0	29.0	30.0	30.4	30.5	31.7	32.9	34.1	37.2	41.0
80°	20.1	20.5	20.5	20.5	20.6	21.0	21.7	22.7	23.5	25.4	26.1
82.5°	14.3	14.3	14.2	14.5	14.7	14.8	14.8	14.8	15.4	15.9	16.6
85°	8.9	9.0	8.5	8.9	9.0	9.0	9.0	9.0	9.6	9.4	9.6
87.5°	3.8	3.9	3.9	4.1	4.1	4.3	4.1	4.3	4.1	4.1	4.3
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°	430.4	430.4	430.4	430.4	430.4	430.4	430.4	430.4	430.4	430.4	430.4
2.5°	444.5	442.5	441.5	439.4	436.7	435.0	433.3	430.9	429.0	426.1	423.5
5°	460.9	456.8	453.1	448.0	443.0	438.7	434.3	429.4	424.9	420.0	414.7
7.5°	479.2	472.7	464.8	455.8	448.1	441.5	434.0	426.6	420.0	412.1	404.9
10°	496.8	486.3	475.9	463.8	452.6	442.7	432.6	422.4	413.7	403.9	395.1
12.5°	510.4	500.5	485.0	470.0	455.3	442.5	429.9	417.4	406.0	395.2	384.6
15°	522.4	506.0	492.8	476.5	458.5	441.1	425.4	410.9	397.1	384.5	373.7
17.5°	525.8	511.1	496.8	477.6	458.4	438.6	420.5	403.2	387.9	373.9	361.8
20°	525.4	510.6	495.1	476.8	456.3	434.6	414.5	395.2	377.8	361.8	348.8
22.5°	520.3	506.0	490.3	471.8	451.0	428.7	407.5	386.2	367.2	350.5	337.2
25°	514.8	496.8	480.4	461.8	442.0	421.3	398.8	375.8	356.0	338.6	323.5
27.5°	510.1	488.4	468.3	450.0	429.7	411.1	388.7	364.7	344.4	326.1	310.6
30°	502.4	479.5	455.1	435.2	415.5	396.1	375.6	353.8	331.6	313.0	297.4
32.5°	495.7	466.9	440.4	417.9	398.3	381.2	361.6	340.6	318.9	301.2	284.5
35°	488.4	453.9	426.3	399.8	380.2	361.6	346.1	327.1	305.6	286.9	271.8
37.5°	479.7	440.6	408.9	381.9	361.6	342.5	328.5	311.6	292.2	273.5	258.7
40°	470.0	427.0	390.4	362.6	340.8	321.7	309.9	294.9	278.3	259.9	246.1
42.5°	457.7	412.5	373.7	343.3	319.1	301.9	290.1	277.6	262.5	246.4	231.4
45°	442.2	394.4	353.8	321.7	297.8	281.1	268.8	259.6	247.4	232.4	218.3
47.5°	423.2	375.4	333.3	300.0	277.0	260.9	249.5	240.3	231.1	218.1	204.6
50°	398.1	353.8	313.3	279.4	254.9	239.4	229.2	221.8	213.5	202.9	190.6
52.5°	370.5	329.4	289.8	258.0	234.5	218.9	208.4	202.2	195.9	187.2	176.6
55°	338.4	304.9	267.2	236.2	213.1	197.8	189.4	183.4	178.2	171.5	162.6
57.5°	304.4	275.1	242.3	213.7	192.0	177.5	170.1	165.2	160.8	156.0	148.6
60°	268.8	248.0	216.9	190.6	171.7	159.7	152.7	148.1	144.0	140.1	134.6
62.5°	231.6	214.3	191.1	168.8	151.9	140.6	135.5	131.6	127.3	123.9	120.0
65°	193.9	184.0	167.9	146.9	131.4	122.2	117.2	114.0	111.9	108.0	104.9
67.5°	159.6	154.1	140.4	126.3	114.3	106.0	101.4	99.0	96.8	94.9	91.5
70°	127.0	123.0	115.2	105.1	95.7	88.6	85.2	84.5	81.4	79.5	77.8
72.5°	96.8	95.7	89.2	84.8	79.5	73.9	71.3	70.0	67.9	66.2	65.5
75°	68.8	70.3	68.3	66.0	63.5	58.9	56.7	56.0	54.1	53.6	52.7
77.5°	46.9	49.1	49.8	48.8	47.6	46.1	44.5	43.9	42.0	41.6	41.1
80°	29.5	32.8	34.0	33.8	33.3	33.4	31.6	31.4	30.5	30.0	30.5
82.5°	17.9	19.6	21.8	22.4	21.7	22.0	21.5	20.8	20.8	21.2	20.5
85°	9.7	9.9	10.9	11.6	12.5	13.1	12.5	12.6	12.5	12.5	11.9
87.5°	4.3	4.4	4.4	4.3	4.6	4.9	5.6	6.0	5.8	5.3	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	430.4	430.4	430.4	430.4	430.4	430.4	430.4	430.4	430.4	430.4	430.4
2.5°	421.5	420.3	418.3	416.6	412.6	409.9	409.6	409.7	409.4	409.0	408.9
5°	411.3	407.3	403.6	400.3	395.9	391.5	389.4	388.6	388.2	386.3	387.4
7.5°	400.3	394.4	389.9	383.8	378.5	374.7	371.2	369.5	369.1	366.6	365.9
10°	388.7	381.6	374.9	368.8	363.5	358.2	353.9	352.4	350.3	348.3	345.2
12.5°	377.3	368.4	361.1	354.3	347.1	341.1	337.7	335.5	332.9	331.1	330.0
15°	363.7	356.1	347.1	339.8	332.4	327.1	322.5	318.4	316.0	314.5	310.2
17.5°	351.4	341.5	332.9	325.9	317.9	311.9	307.2	303.8	299.7	296.6	293.9
20°	338.2	328.0	320.1	311.8	303.6	296.2	290.3	287.5	284.6	281.7	280.2
22.5°	324.1	315.2	306.3	297.6	288.9	281.1	277.3	273.4	270.8	267.9	265.9
25°	311.8	302.0	293.2	283.4	273.9	269.3	264.2	260.2	258.2	255.3	253.1
27.5°	298.6	289.2	278.7	268.6	263.0	255.1	251.7	248.6	245.9	243.0	241.5
30°	286.3	275.4	264.8	257.0	249.7	244.0	240.8	237.0	233.3	231.9	229.9
32.5°	273.4	261.6	252.4	244.5	238.4	231.6	228.5	225.4	221.8	220.1	218.3
35°	259.9	248.5	239.4	232.3	225.9	220.8	217.4	214.2	211.9	209.4	208.0
37.5°	245.7	235.8	227.1	220.0	214.2	210.1	205.8	203.2	200.2	197.8	196.8
40°	232.3	223.4	215.0	208.4	203.1	198.1	194.4	191.1	189.2	187.2	185.5
42.5°	220.1	210.9	203.8	196.8	192.0	187.2	183.4	181.1	177.8	177.0	174.6
45°	207.2	198.6	191.5	185.0	180.0	176.1	171.7	168.8	166.7	164.7	163.8
47.5°	194.0	186.2	179.5	173.5	168.4	164.0	160.6	157.5	155.3	153.4	152.4
50°	181.2	174.4	167.7	161.9	156.7	153.4	149.3	145.9	144.2	142.2	141.0
52.5°	167.7	162.1	154.9	150.0	145.1	140.8	136.7	134.5	132.8	131.1	130.2
55°	155.1	149.1	143.0	137.7	132.9	128.5	125.3	123.5	121.3	120.3	120.1
57.5°	142.2	136.0	130.9	126.1	120.6	117.2	114.3	112.3	110.4	109.6	109.6
60°	128.0	123.0	118.3	113.0	109.0	105.1	102.0	100.7	98.8	98.5	97.3
62.5°	115.0	110.4	105.8	100.9	97.3	93.3	91.1	89.2	88.2	86.9	85.5
65°	101.5	97.4	93.0	88.7	85.8	81.6	79.5	77.3	76.1	74.6	72.9
67.5°	88.6	84.6	80.5	76.6	74.2	70.1	68.8	66.0	65.2	63.5	61.9
70°	74.9	72.2	68.9	65.0	63.0	59.7	58.4	55.8	54.4	53.4	52.6
72.5°	63.1	60.6	56.8	54.3	51.7	49.7	47.4	46.2	45.1	44.2	44.0
75°	51.5	48.3	46.1	43.7	42.0	39.9	38.9	38.1	37.5	37.0	36.5
77.5°	39.4	38.1	35.8	33.4	32.1	31.2	30.5	30.2	29.7	29.5	29.0
80°	29.4	27.5	26.1	25.3	24.2	23.5	23.0	21.8	21.2	20.8	20.5
82.5°	19.5	18.9	17.9	17.1	16.2	16.0	15.5	15.2	15.0	15.0	14.8
85°	11.8	10.4	10.4	10.2	10.2	10.1	9.7	9.7	9.4	9.9	9.9
87.5°	4.8	4.8	4.4	4.4	4.6	4.3	4.1	4.1	4.1	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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CATALOG NUMBER: S125RDRP-H375D930-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	430.4	430.4	430.4	430.4
2.5°	408.9	408.0	408.2	407.2
5°	385.5	385.0	383.3	381.9
7.5°	364.2	361.9	361.8	360.4
10°	344.2	342.2	341.1	341.3
12.5°	326.8	324.6	324.6	323.2
15°	308.2	306.0	306.3	306.1
17.5°	292.8	291.3	290.1	289.1
20°	277.8	275.9	275.3	274.4
22.5°	264.0	262.6	262.8	262.8
25°	250.9	251.0	249.5	249.1
27.5°	239.2	238.9	238.6	237.9
30°	228.3	227.0	226.6	225.9
32.5°	217.1	216.9	215.5	216.0
35°	205.6	205.1	204.8	204.4
37.5°	195.1	194.0	193.9	193.5
40°	184.3	184.0	182.4	183.3
42.5°	172.7	172.0	172.0	172.0
45°	163.0	161.1	161.1	160.4
47.5°	152.0	151.4	151.0	149.8
50°	141.3	140.3	139.9	139.9
52.5°	130.2	130.0	130.4	129.7
55°	120.5	120.6	120.5	120.1
57.5°	109.9	109.0	109.0	109.2
60°	97.3	97.3	97.6	96.9
62.5°	85.2	84.8	83.6	83.3
65°	72.7	71.3	71.2	71.3
67.5°	61.6	61.1	60.2	60.4
70°	52.0	51.9	51.0	50.5
72.5°	43.5	43.5	43.0	43.0
75°	36.3	36.0	35.8	36.2
77.5°	28.0	27.1	27.5	27.0
80°	20.3	20.6	20.3	20.1
82.5°	15.0	14.7	14.8	14.7
85°	9.6	9.2	9.4	9.2
87.5°	3.9	4.1	4.1	3.8
90°	0.0	0.0	0.0	0.0



TEST NUMBER: P243783
 CATALOG NUMBER: S125RDRP-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	13.81	15.35	14.17	15.66	15.97	14.50	16.04	14.87	16.36	16.67
	3H	14.89	16.27	15.27	16.60	16.96	15.98	17.36	16.36	17.69	18.05
	4H	15.25	16.54	15.65	16.89	17.27	16.51	17.80	16.91	18.15	18.53
	6H	15.46	16.66	15.88	17.03	17.42	16.86	18.06	17.27	18.43	18.82
	8H	15.52	16.66	15.95	17.05	17.45	16.96	18.10	17.39	18.49	18.89
	12H	15.56	16.65	15.99	17.03	17.46	17.02	18.11	17.45	18.49	18.92
4H	2H	15.33	16.62	15.73	16.97	17.35	15.38	16.67	15.78	17.02	17.40
	3H	16.37	17.45	16.78	17.85	18.25	17.04	18.11	17.45	18.51	18.91
	4H	16.73	17.70	17.17	18.12	18.55	17.64	18.60	18.07	19.02	19.46
	6H	16.98	17.82	17.44	18.26	18.72	18.07	18.91	18.53	19.35	19.81
	8H	17.04	17.83	17.50	18.27	18.74	18.19	18.98	18.66	19.42	19.89
	12H	17.09	17.79	17.57	18.27	18.74	18.28	18.98	18.76	19.46	19.93
8H	4H	17.09	17.88	17.56	18.32	18.79	17.79	18.57	18.25	19.02	19.48
	6H	17.39	18.04	17.88	18.53	19.00	18.31	18.96	18.81	19.45	19.93
	8H	17.48	18.06	18.00	18.57	19.06	18.49	19.07	19.00	19.58	20.07
	12H	17.57	18.08	18.08	18.57	19.14	18.63	19.14	19.14	19.63	20.20
12H	4H	17.12	17.82	17.60	18.30	18.77	17.78	18.48	18.26	18.96	19.43
	6H	17.42	18.00	17.93	18.51	19.00	18.30	18.89	18.82	19.40	19.88
	8H	17.55	18.07	18.06	18.56	19.12	18.52	19.04	19.03	19.53	20.09