

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: P242893

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242893
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S375D935-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

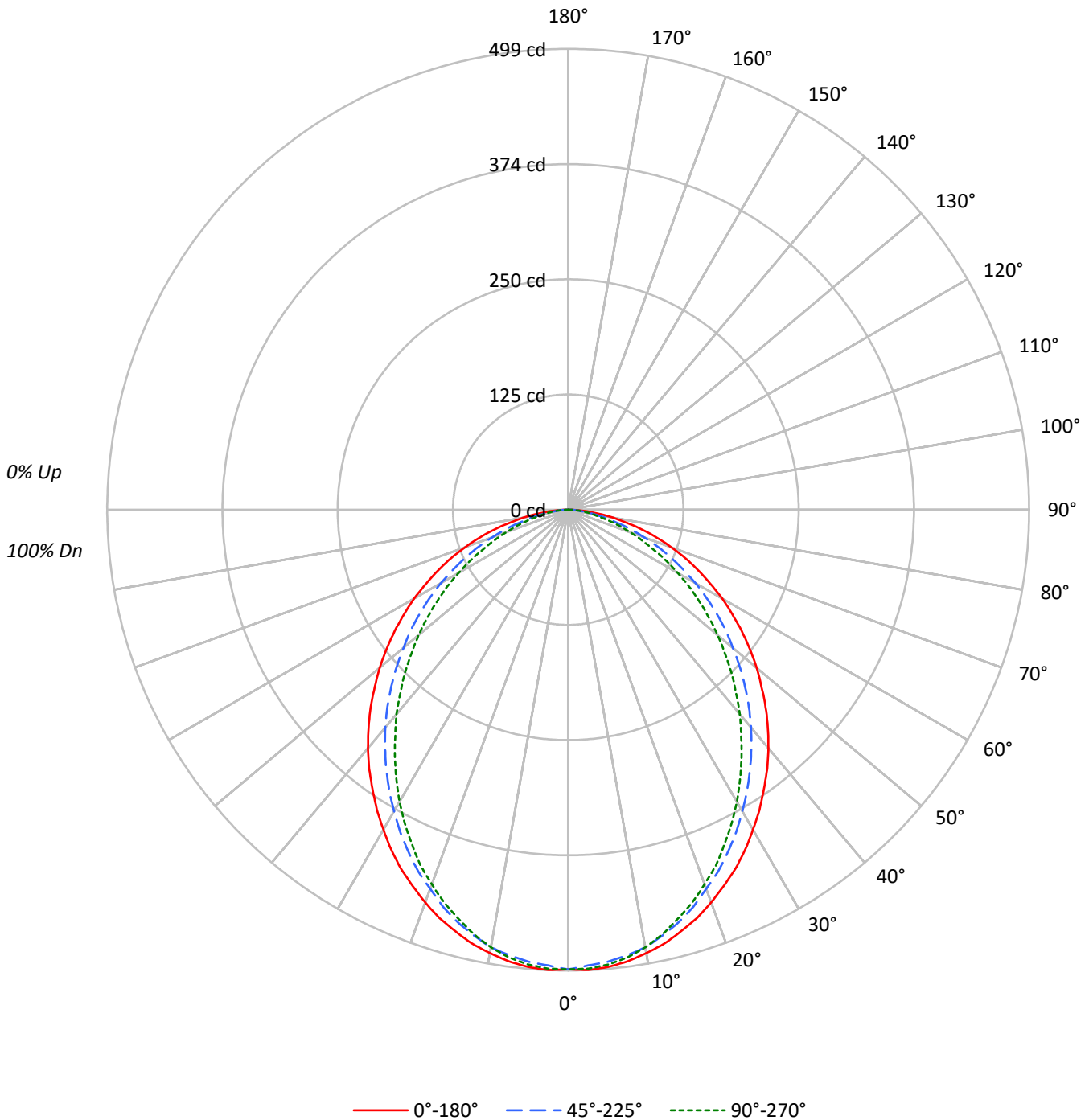
Lumens per Lamp: N/A
Luminaire Lumens: 1175.9 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): 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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	80	98	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	64	61					61			
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55	53					53			
5	78	65	57	50	76	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	44	55	48	43	53	47	43	41					41			
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36					36			
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33					33			
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31	29					29			
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27					27			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3537	3537	3537
5°	3546	3505	3527
10°	3519	3473	3473
15°	3477	3402	3374
20°	3423	3304	3264
25°	3361	3207	3137
30°	3283	3095	2996
35°	3203	2978	2838
40°	3129	2857	2682
45°	3038	2721	2513
50°	2947	2573	2336
55°	2841	2431	2147
60°	2736	2260	1945
65°	2612	2062	1714
70°	2469	1812	1477
75°	2271	1527	1227
80°	2001	1199	1031
85°	1688	979	921

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3038 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.8	4.0
10°-20°	130.9	11.1
20°-30°	189.8	16.1
30°-40°	216.3	18.4
40°-50°	210.8	17.9
50°-60°	177.4	15.1
60°-70°	124.3	10.6
70°-80°	63.7	5.4
80°-90°	15.9	1.4
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°	367.6	31.3
0°-40°	583.8	49.6
0°-60°	972.0	82.7
0°-90°	1175.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1175.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	498	498	498	498	498	
5°	497	496	491	495	494	47
15°	472	470	462	462	459	133
25°	429	423	409	404	400	197
35°	369	360	343	332	327	231
45°	302	291	271	256	250	233
55°	229	217	196	179	173	205
65°	155	142	123	108	102	154
75°	83	71	56	47	45	87
85°	21	14	12	12	11	24
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	497.7	497.7	497.7	497.7	497.7
2.5°	498.9	497.7	494.0	497.7	497.4
5°	497.0	495.5	491.3	495.1	494.4
7.5°	493.2	491.7	486.8	489.8	489.1
10°	487.6	486.5	481.2	482.3	481.2
12.5°	481.2	479.7	472.2	472.9	471.0
15°	472.5	470.3	462.4	462.0	458.6
17.5°	463.5	460.1	450.7	448.9	446.2
20°	452.6	448.9	436.8	435.0	431.6
22.5°	440.6	436.8	424.1	419.9	417.3
25°	428.6	422.9	409.0	404.1	400.0
27.5°	415.0	408.3	393.6	387.2	383.1
30°	400.0	392.8	377.1	368.4	365.0
32.5°	385.3	376.7	360.5	350.7	346.2
35°	369.2	360.1	343.2	332.3	327.1
37.5°	353.8	342.9	325.6	312.8	307.5
40°	337.2	325.9	307.9	293.6	289.1
42.5°	319.9	308.3	289.5	275.9	268.8
45°	302.2	291.3	270.7	255.6	250.0
47.5°	283.8	272.6	251.9	236.5	230.1
50°	266.5	254.1	232.7	216.9	211.3
52.5°	247.7	235.0	215.0	197.7	192.1
55°	229.3	217.3	196.2	179.3	173.3
57.5°	210.5	197.7	177.4	160.9	155.6
60°	192.5	179.3	159.0	142.5	136.8
62.5°	173.3	160.9	140.2	125.2	119.5
65°	155.3	142.5	122.6	107.5	101.9
67.5°	137.2	124.4	105.3	91.0	86.5
70°	118.8	106.0	87.2	75.6	71.1
72.5°	100.7	88.3	71.1	60.5	57.9
75°	82.7	71.4	55.6	47.4	44.7
77.5°	64.3	55.3	42.1	35.7	33.5
80°	48.9	39.8	29.3	25.9	25.2
82.5°	33.8	25.9	19.5	18.4	18.0
85°	20.7	13.9	12.0	11.7	11.3
87.5°	8.6	6.0	5.6	5.6	5.3
90°	0.0	0.0	0.0	0.0	0.0



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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	15.73	17.30	16.09	17.62	17.93	14.16	15.74	14.53	16.05	16.37
	3H	17.51	18.93	17.89	19.26	19.62	15.48	16.90	15.85	17.22	17.58
	4H	18.17	19.51	18.57	19.86	20.23	15.89	17.22	16.29	17.57	17.94
	6H	18.64	19.88	19.06	20.24	20.63	16.14	17.38	16.55	17.74	18.13
	8H	18.79	19.97	19.22	20.36	20.76	16.22	17.40	16.65	17.79	18.19
	12H	18.89	20.02	19.32	20.40	20.83	16.28	17.40	16.71	17.79	18.21
4H	2H	16.12	17.45	16.52	17.80	18.18	14.85	16.18	15.25	16.53	16.91
	3H	18.10	19.21	18.51	19.61	20.01	16.35	17.46	16.76	17.86	18.26
	4H	18.89	19.89	19.32	20.30	20.74	16.85	17.85	17.28	18.26	18.70
	6H	19.48	20.35	19.94	20.79	21.25	17.19	18.06	17.64	18.50	18.96
	8H	19.67	20.49	20.13	20.93	21.40	17.30	18.11	17.76	18.56	19.02
	12H	19.81	20.54	20.29	21.02	21.49	17.39	18.12	17.87	18.59	19.06
8H	4H	19.01	19.83	19.47	20.27	20.74	17.16	17.98	17.62	18.42	18.88
	6H	19.69	20.36	20.18	20.85	21.33	17.58	18.26	18.08	18.75	19.22
	8H	19.93	20.54	20.45	21.05	21.53	17.74	18.35	18.25	18.86	19.34
	12H	20.13	20.66	20.64	21.16	21.72	17.88	18.42	18.39	18.91	19.47
12H	4H	19.00	19.74	19.49	20.21	20.68	17.20	17.93	17.68	18.40	18.87
	6H	19.68	20.29	20.19	20.80	21.28	17.63	18.24	18.15	18.75	19.24
	8H	19.97	20.50	20.48	20.99	21.56	17.84	18.38	18.35	18.87	19.43