

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: P242791

Luminaire Tested: S125DRP-S610D935-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242791
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-S610D935-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

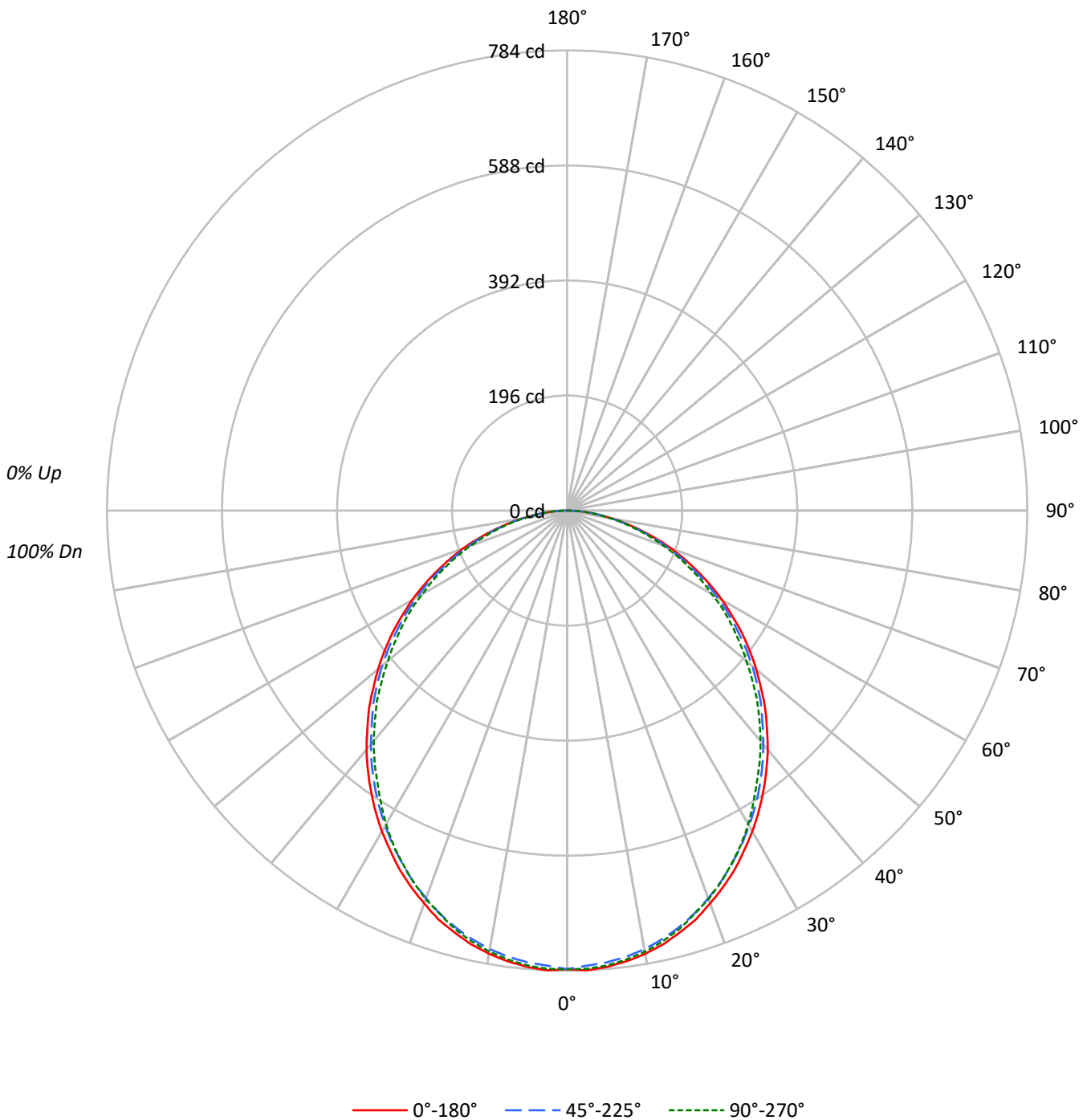
Lumens per Lamp: N/A
Luminaire Lumens: 2033.9 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 18.8
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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84				84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70				70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59				59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51				51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44				44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39				39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34				34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31				31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28				28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25				25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5554	5554	5554
5°	5566	5514	5548
10°	5533	5475	5506
15°	5472	5409	5432
20°	5387	5316	5326
25°	5294	5207	5202
30°	5180	5089	5064
35°	5058	4962	4892
40°	4933	4824	4755
45°	4797	4698	4605
50°	4648	4546	4410
55°	4504	4374	4251
60°	4333	4200	4051
65°	4127	3992	3858
70°	3932	3751	3622
75°	3581	3463	3345
80°	3188	3139	3062
85°	2773	2822	2675

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4797 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.7	3.6
10°-20°	208.3	10.2
20°-30°	307.5	15.1
30°-40°	358.8	17.6
40°-50°	360.3	17.7
50°-60°	316.3	15.6
60°-70°	235.6	11.6
70°-80°	134.6	6.6
80°-90°	38.8	1.9
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°	589.5	29.0
0°-40°	948.3	46.6
0°-60°	1624.9	79.9
0°-90°	2033.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2033.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	781	781	781	781	781	
5°	780	779	773	778	778	74
15°	744	742	735	738	738	210
25°	675	672	664	665	663	311
35°	583	580	572	569	564	365
45°	477	475	467	460	458	368
55°	364	362	353	347	343	325
65°	245	244	237	232	229	243
75°	130	129	126	124	122	139
85°	34	35	35	34	33	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	781.4	781.4	781.4	781.4	781.4
2.5°	783.9	782.0	775.9	782.0	781.4
5°	780.2	779.0	772.8	778.3	777.7
7.5°	774.6	773.4	766.6	772.2	771.5
10°	766.6	765.4	758.6	763.5	762.9
12.5°	756.7	754.2	748.0	751.8	751.8
15°	743.7	741.9	735.1	738.2	738.2
17.5°	730.1	727.0	720.2	723.9	720.8
20°	712.2	711.0	702.9	707.2	704.2
22.5°	694.3	691.8	684.4	686.8	685.0
25°	675.1	672.0	664.0	665.2	663.4
27.5°	652.8	651.0	642.9	643.6	641.7
30°	631.2	629.3	620.1	618.8	617.0
32.5°	607.7	604.6	596.6	594.1	590.4
35°	583.0	580.5	571.9	568.8	563.8
37.5°	557.6	554.5	546.5	542.2	539.1
40°	531.7	528.6	519.9	514.4	512.5
42.5°	503.8	501.4	492.7	487.8	484.7
45°	477.3	474.8	467.4	460.0	458.1
47.5°	448.2	448.8	439.6	432.1	427.8
50°	420.4	418.5	411.1	403.1	398.8
52.5°	392.0	390.7	382.7	375.9	370.9
55°	363.5	361.7	353.0	347.4	343.1
57.5°	333.2	332.6	325.2	317.8	315.9
60°	304.8	302.3	295.5	289.3	285.0
62.5°	275.1	273.3	267.7	260.9	257.8
65°	245.4	244.2	237.4	231.8	229.4
67.5°	216.4	213.9	209.0	204.0	202.8
70°	189.2	186.1	180.5	176.8	174.3
72.5°	159.5	157.6	154.6	150.2	147.8
75°	130.4	129.2	126.1	124.3	121.8
77.5°	103.2	102.6	100.8	99.5	97.7
80°	77.9	77.9	76.7	76.0	74.8
82.5°	55.6	54.4	54.4	53.2	53.2
85°	34.0	34.6	34.6	34.0	32.8
87.5°	16.7	16.7	16.1	16.1	14.8
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	17.31	18.92	17.67	19.24	19.55	16.98	18.60	17.34	18.91	19.23
	3H	19.08	20.54	19.45	20.86	21.23	18.71	20.17	19.09	20.50	20.86
	4H	19.73	21.11	20.13	21.46	21.83	19.36	20.73	19.76	21.08	21.46
	6H	20.21	21.49	20.62	21.85	22.24	19.84	21.12	20.25	21.48	21.87
	8H	20.37	21.58	20.79	21.97	22.37	20.00	21.22	20.43	21.61	22.01
	12H	20.47	21.64	20.90	22.02	22.45	20.12	21.28	20.54	21.66	22.09
4H	2H	17.88	19.26	18.28	19.61	19.99	17.63	19.00	18.02	19.35	19.73
	3H	19.88	21.03	20.29	21.43	21.83	19.58	20.73	19.99	21.13	21.53
	4H	20.67	21.71	21.10	22.12	22.56	20.35	21.40	20.78	21.81	22.25
	6H	21.27	22.19	21.73	22.63	23.08	20.97	21.88	21.42	22.32	22.78
	8H	21.48	22.33	21.94	22.78	23.24	21.18	22.03	21.64	22.47	22.94
	12H	21.63	22.40	22.11	22.87	23.34	21.33	22.10	21.81	22.57	23.04
8H	4H	20.95	21.81	21.41	22.25	22.71	20.68	21.53	21.14	21.97	22.44
	6H	21.68	22.39	22.18	22.88	23.36	21.41	22.13	21.91	22.61	23.09
	8H	21.96	22.60	22.47	23.10	23.59	21.70	22.34	22.21	22.84	23.33
	12H	22.19	22.75	22.70	23.25	23.81	21.93	22.50	22.44	22.99	23.55
12H	4H	20.98	21.75	21.46	22.23	22.69	20.71	21.48	21.19	21.95	22.42
	6H	21.73	22.37	22.24	22.88	23.37	21.48	22.11	21.98	22.62	23.11
	8H	22.07	22.64	22.58	23.13	23.69	21.82	22.38	22.33	22.87	23.43