

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: P243651

Luminaire Tested: S125DRP-H610D935-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243651
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-51)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-H610D935-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

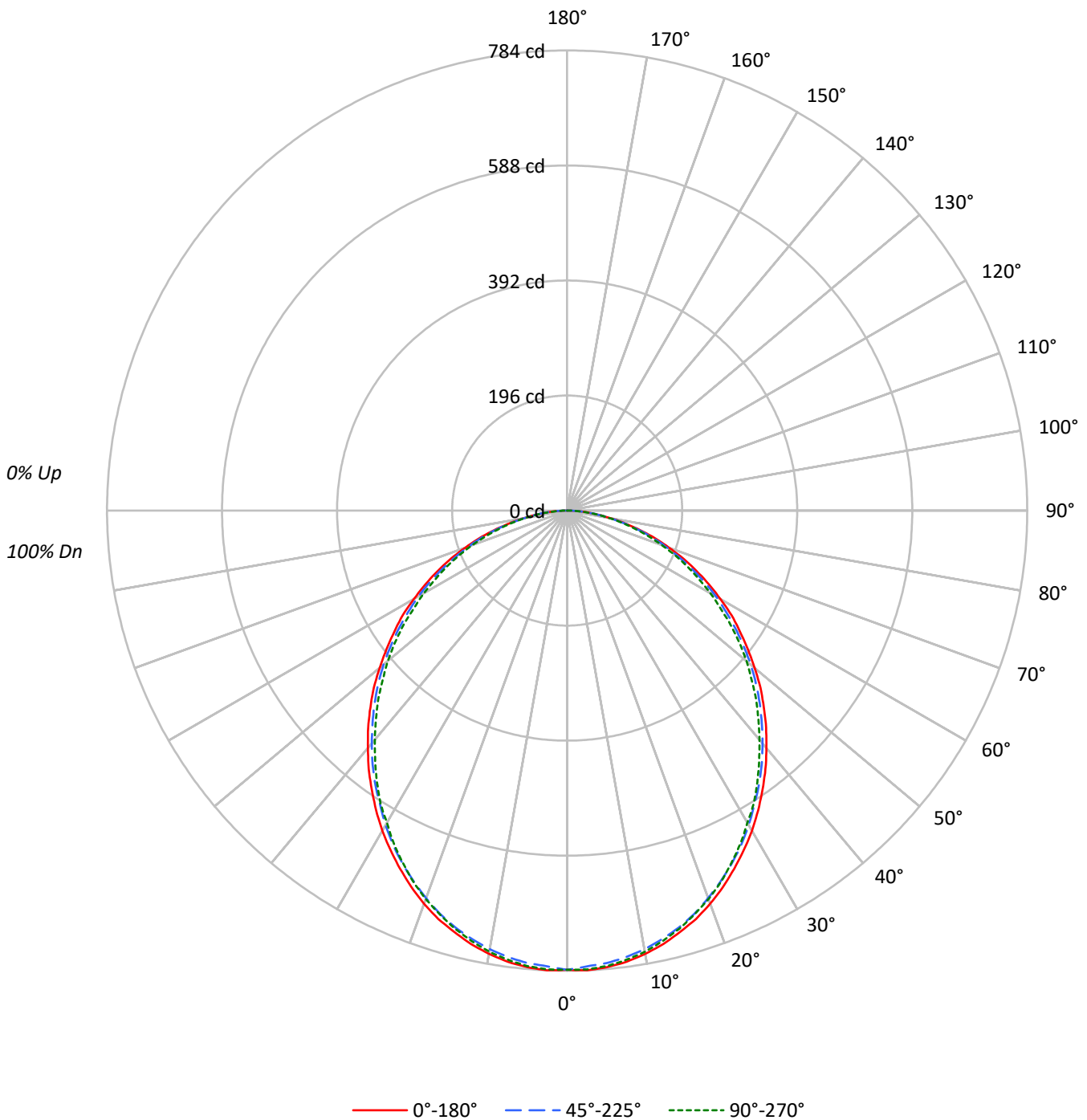
Lumens per Lamp: N/A
Luminaire Lumens: 2019.6 lumens
Efficiency: N/A
Efficacy: 117.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 17.2
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	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																												
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84																												
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70																												
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60																												
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51																												
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44																												
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39																												
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35																												
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31																												
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28																												
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5561	5561	5561
5°	5570	5521	5557
10°	5535	5476	5509
15°	5469	5410	5427
20°	5392	5314	5327
25°	5280	5204	5195
30°	5168	5078	5041
35°	5035	4946	4900
40°	4900	4804	4729
45°	4765	4662	4575
50°	4607	4512	4411
55°	4452	4332	4218
60°	4284	4161	4014
65°	4083	3939	3804
70°	3830	3686	3566
75°	3531	3422	3262
80°	3078	3053	2984
85°	2667	2667	2528

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4765 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.8	3.7
10°-20°	208.3	10.3
20°-30°	307.0	15.2
30°-40°	357.6	17.7
40°-50°	358.3	17.7
50°-60°	313.2	15.5
60°-70°	232.5	11.5
70°-80°	131.8	6.5
80°-90°	37.0	1.8
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°	589.1	29.2
0°-40°	946.7	46.9
0°-60°	1618.3	80.1
0°-90°	2019.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2019.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	782	782	782	782	782	
5°	781	780	774	780	779	74
15°	743	742	735	739	738	210
25°	673	671	664	665	662	310
35°	580	577	570	567	565	363
45°	474	473	464	457	455	366
55°	359	359	350	342	340	322
65°	243	241	234	229	226	241
75°	129	126	125	122	119	136
85°	33	33	33	32	31	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	782.4	782.4	782.4	782.4	782.4
2.5°	784.1	783.0	777.2	783.0	782.4
5°	780.7	779.5	773.8	779.5	778.9
7.5°	775.5	773.8	767.5	773.2	772.0
10°	766.9	765.7	758.8	763.4	763.4
12.5°	756.5	754.8	747.9	752.0	751.4
15°	743.3	742.2	735.3	739.3	737.6
17.5°	729.6	726.7	720.4	723.8	721.5
20°	712.9	710.6	702.6	705.5	704.3
22.5°	694.0	691.1	683.6	685.4	684.8
25°	673.3	671.0	663.6	665.3	662.4
27.5°	652.1	649.2	642.3	642.3	639.5
30°	629.7	626.8	618.8	618.8	614.2
32.5°	605.6	603.3	593.5	593.0	591.8
35°	580.3	576.9	570.0	566.6	564.8
37.5°	555.1	552.2	544.7	540.1	537.3
40°	528.1	526.4	517.8	513.7	509.7
42.5°	501.7	500.0	490.8	483.9	482.2
45°	474.1	473.0	463.8	456.9	455.2
47.5°	446.6	445.4	436.3	428.8	425.9
50°	416.7	416.7	408.1	400.7	398.9
52.5°	388.0	387.5	378.8	371.4	369.7
55°	359.3	358.8	349.6	342.1	340.4
57.5°	332.4	328.9	320.9	315.1	309.4
60°	301.4	299.6	292.7	285.3	282.4
62.5°	272.7	270.4	263.5	257.2	253.1
65°	242.8	241.1	234.2	229.0	226.2
67.5°	214.7	212.4	205.5	201.5	199.2
70°	184.3	182.5	177.4	172.2	171.6
72.5°	157.3	155.0	152.1	147.5	145.2
75°	128.6	126.3	124.6	122.3	118.8
77.5°	101.0	99.9	98.7	97.0	95.3
80°	75.2	75.2	74.6	73.5	72.9
82.5°	53.4	54.0	52.2	51.1	51.1
85°	32.7	32.7	32.7	31.6	31.0
87.5°	16.1	14.4	14.4	13.2	13.2
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	17.27	18.88	17.63	19.20	19.51	16.93	18.55	17.30	18.86	19.18
	3H	19.03	20.49	19.40	20.81	21.17	18.65	20.10	19.02	20.43	20.79
	4H	19.68	21.05	20.08	21.40	21.77	19.28	20.66	19.68	21.00	21.38
	6H	20.14	21.41	20.55	21.78	22.17	19.76	21.03	20.17	21.40	21.79
	8H	20.29	21.50	20.71	21.89	22.29	19.91	21.13	20.34	21.52	21.92
	12H	20.39	21.55	20.82	21.93	22.36	20.01	21.18	20.44	21.56	21.99
4H	2H	17.84	19.21	18.24	19.56	19.94	17.57	18.95	17.97	19.30	19.67
	3H	19.82	20.97	20.23	21.37	21.77	19.50	20.66	19.91	21.05	21.45
	4H	20.60	21.64	21.03	22.05	22.49	20.27	21.31	20.70	21.73	22.16
	6H	21.19	22.10	21.64	22.54	22.99	20.87	21.78	21.33	22.22	22.68
	8H	21.39	22.24	21.85	22.68	23.15	21.07	21.92	21.53	22.37	22.83
	12H	21.53	22.30	22.01	22.77	23.24	21.22	21.98	21.70	22.46	22.93
8H	4H	20.88	21.73	21.34	22.17	22.64	20.59	21.44	21.05	21.89	22.35
	6H	21.59	22.30	22.08	22.79	23.26	21.31	22.02	21.81	22.51	22.99
	8H	21.86	22.50	22.37	23.00	23.49	21.59	22.22	22.10	22.73	23.21
	12H	22.08	22.64	22.59	23.14	23.70	21.80	22.36	22.31	22.85	23.42
12H	4H	20.91	21.67	21.39	22.15	22.62	20.63	21.39	21.11	21.87	22.34
	6H	21.64	22.27	22.15	22.78	23.27	21.37	22.01	21.88	22.51	23.00
	8H	21.97	22.53	22.48	23.02	23.58	21.70	22.26	22.21	22.75	23.31