

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P243651

Luminaire Tested: **S125DR-H610D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
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 (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DR-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: ELECTRONIC 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

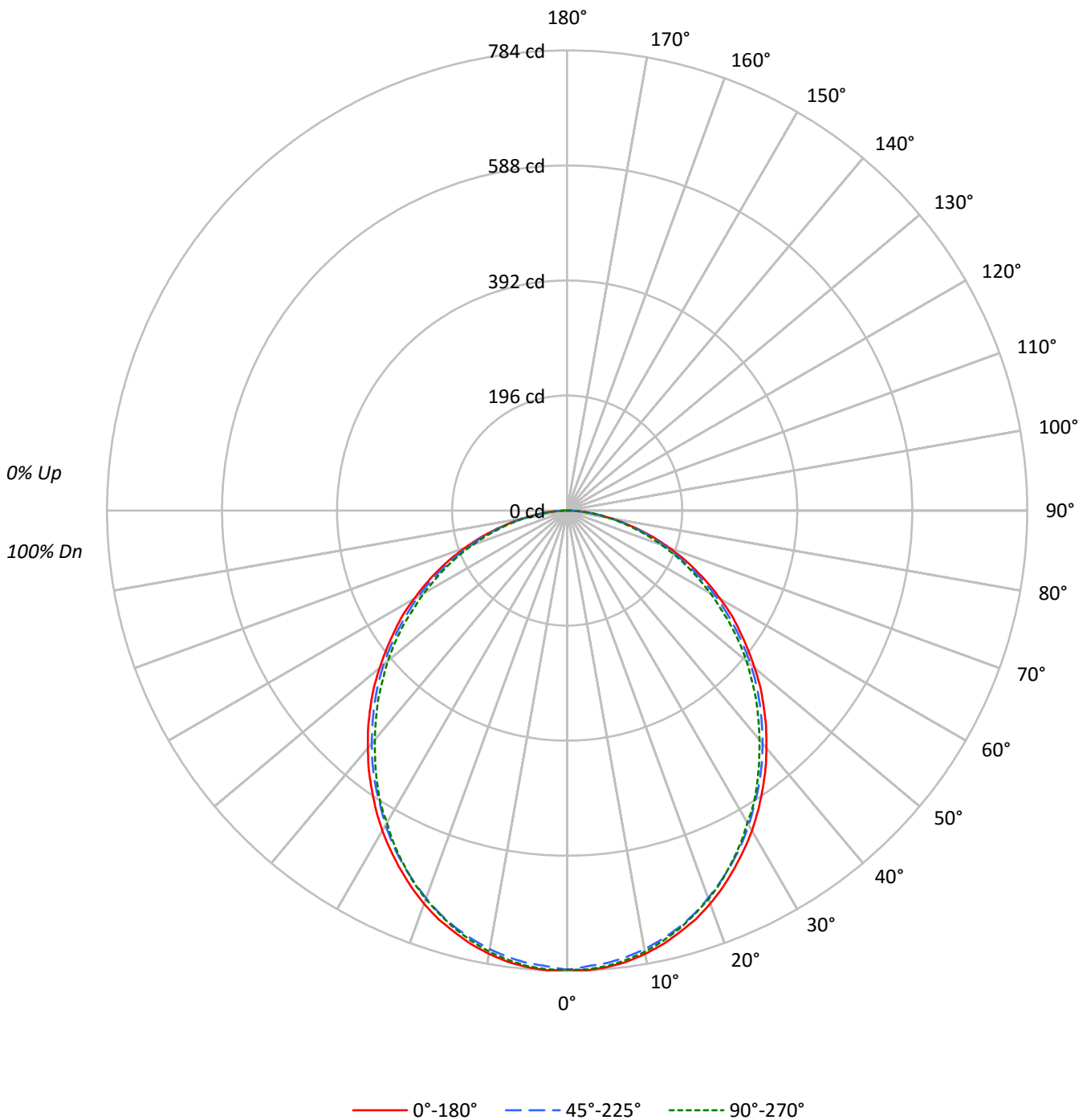
Input Watts (W): 17.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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



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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

(END OF REPORT)