

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: P242767

Luminaire Tested: **S125DR-S610D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242767  
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 (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DR-S610D927-X4F0-XX-UDD-F-W  
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1871.3 lumens  
Efficiency: N/A  
Efficacy: 99.5 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

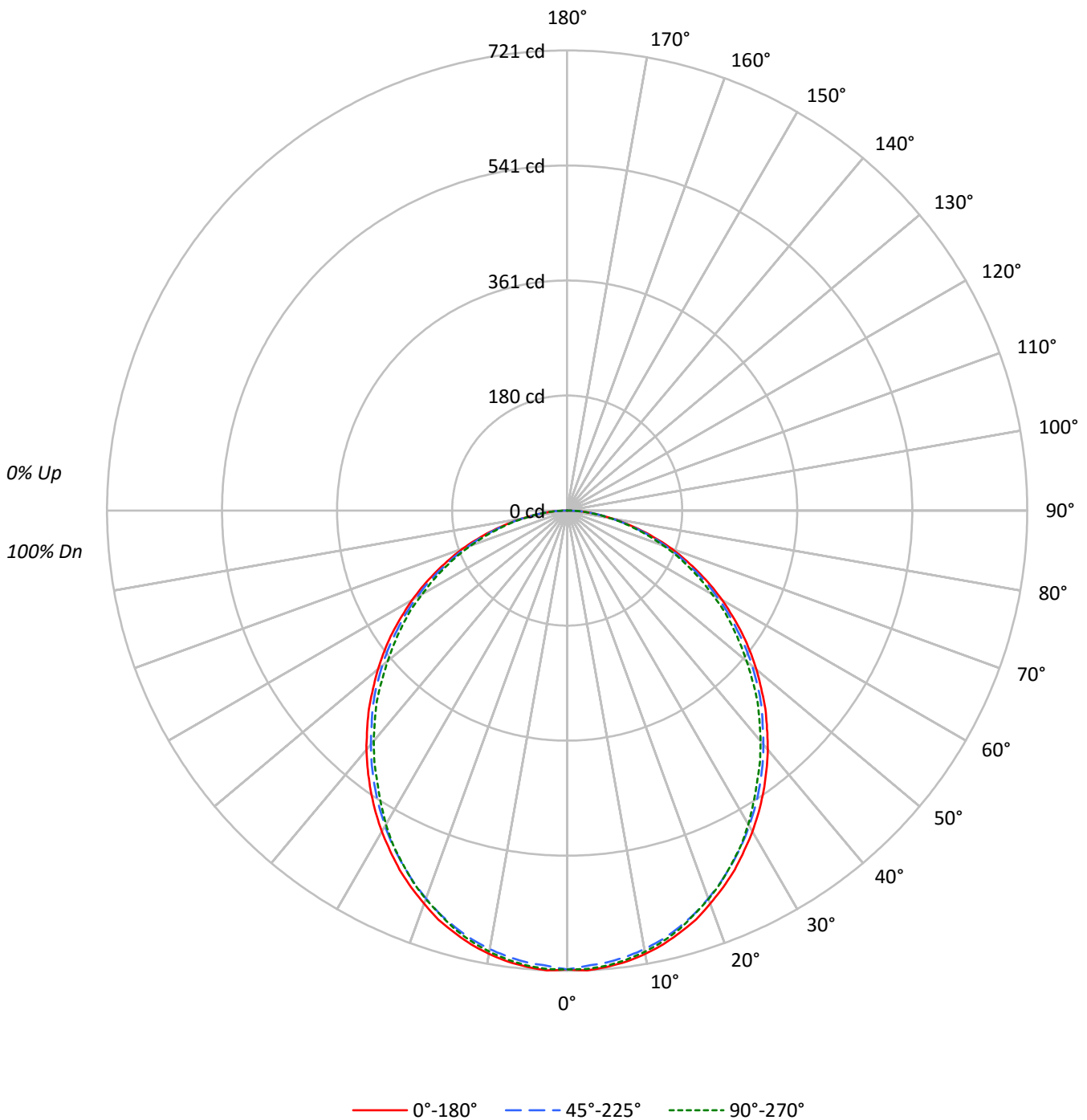
Input Watts (W): 18.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	94	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	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5110	5110	5110
5°	5121	5073	5105
10°	5090	5037	5066
15°	5035	4976	4998
20°	4956	4891	4900
25°	4871	4791	4786
30°	4767	4682	4659
35°	4654	4565	4501
40°	4539	4439	4375
45°	4414	4322	4237
50°	4277	4183	4057
55°	4145	4025	3912
60°	3986	3865	3727
65°	3797	3673	3548
70°	3618	3452	3333
75°	3295	3185	3078
80°	2935	2886	2816
85°	2552	2601	2455



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.8	3.6
10°-20°	191.6	10.2
20°-30°	282.9	15.1
30°-40°	330.1	17.6
40°-50°	331.5	17.7
50°-60°	291.0	15.6
60°-70°	216.8	11.6
70°-80°	123.8	6.6
80°-90°	35.8	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°	542.4	29.0
0°-40°	872.5	46.6
0°-60°	1495.0	79.9
0°-90°	1871.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1871.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	719	719	719	719	719	
5°	718	717	711	716	716	68
15°	684	683	676	679	679	193
25°	621	618	611	612	610	286
35°	536	534	526	523	519	336
45°	439	437	430	423	422	338
55°	334	333	325	320	316	299
65°	226	225	218	213	211	224
75°	120	119	116	114	112	128
85°	31	32	32	31	30	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	719.0	719.0	719.0	719.0	719.0
2.5°	721.2	719.5	713.9	719.5	719.0
5°	717.8	716.7	711.0	716.1	715.6
7.5°	712.7	711.6	705.3	710.4	709.9
10°	705.3	704.2	697.9	702.5	701.9
12.5°	696.2	693.9	688.3	691.7	691.7
15°	684.3	682.6	676.3	679.2	679.2
17.5°	671.8	668.9	662.7	666.1	663.2
20°	655.3	654.1	646.7	650.7	647.9
22.5°	638.8	636.5	629.7	631.9	630.2
25°	621.1	618.3	610.9	612.0	610.3
27.5°	600.7	599.0	591.6	592.1	590.4
30°	580.8	579.0	570.5	569.4	567.7
32.5°	559.1	556.3	548.9	546.6	543.2
35°	536.4	534.1	526.1	523.3	518.8
37.5°	513.1	510.2	502.8	498.8	496.0
40°	489.2	486.3	478.4	473.2	471.5
42.5°	463.6	461.3	453.3	448.8	445.9
45°	439.1	436.8	430.0	423.2	421.5
47.5°	412.4	413.0	404.4	397.6	393.6
50°	386.8	385.1	378.3	370.9	366.9
52.5°	360.6	359.5	352.1	345.8	341.3
55°	334.5	332.8	324.8	319.7	315.7
57.5°	306.6	306.0	299.2	292.4	290.7
60°	280.4	278.1	271.9	266.2	262.2
62.5°	253.1	251.4	246.3	240.0	237.2
65°	225.8	224.7	218.4	213.3	211.0
67.5°	199.1	196.8	192.3	187.7	186.6
70°	174.1	171.2	166.1	162.7	160.4
72.5°	146.8	145.0	142.2	138.2	135.9
75°	120.0	118.9	116.0	114.3	112.1
77.5°	95.0	94.4	92.7	91.6	89.9
80°	71.7	71.7	70.5	70.0	68.8
82.5°	51.2	50.1	50.1	48.9	48.9
85°	31.3	31.9	31.9	31.3	30.1
87.5°	15.4	15.4	14.8	14.8	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)