

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: P242889

Luminaire Tested: **S125RDR-S610D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242889  
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 (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S610D930-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1831.3 lumens  
Efficiency: N/A  
Efficacy: 97.4 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

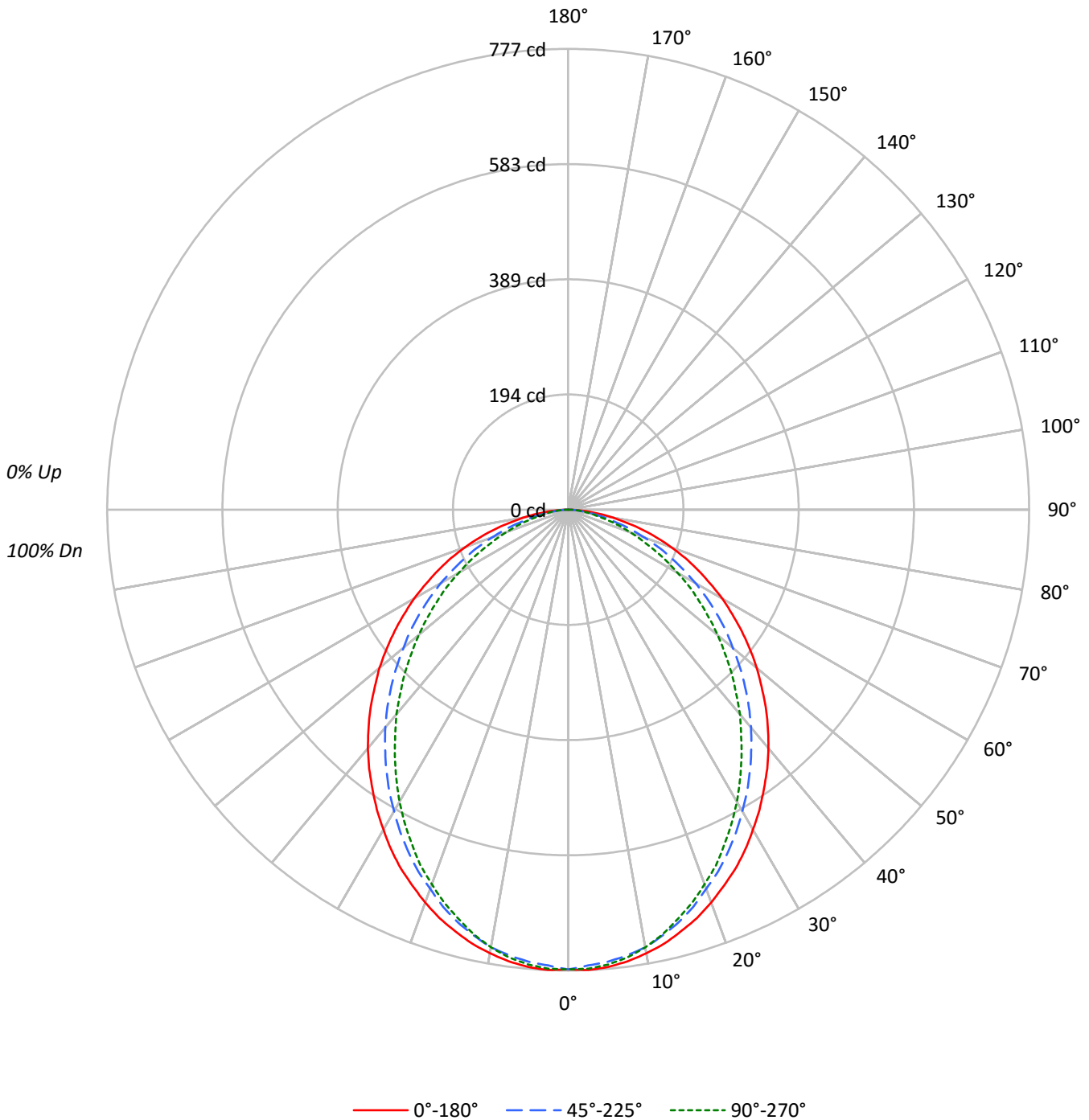
Input Watts (W): 18.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	5509	5509	5509
5°	5521	5459	5492
10°	5480	5408	5408
15°	5415	5298	5255
20°	5331	5145	5083
25°	5234	4995	4885
30°	5112	4819	4665
35°	4988	4638	4419
40°	4872	4448	4177
45°	4731	4237	3913
50°	4590	4007	3638
55°	4425	3787	3344
60°	4260	3520	3029
65°	4066	3209	2667
70°	3844	2822	2298
75°	3537	2378	1914
80°	3115	1870	1604
85°	2626	1525	1435



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.9	4.0
10°-20°	203.9	11.1
20°-30°	295.6	16.1
30°-40°	336.8	18.4
40°-50°	328.2	17.9
50°-60°	276.2	15.1
60°-70°	193.6	10.6
70°-80°	99.3	5.4
80°-90°	24.8	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
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0°-30°	572.4	31.3
0°-40°	909.2	49.6
0°-60°	1513.7	82.7
0°-90°	1831.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1831.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	774	772	765	771	770	73
15°	736	732	720	720	714	207
25°	667	659	637	629	623	307
35°	575	561	534	518	509	360
45°	471	454	422	398	389	363
55°	357	338	306	279	270	319
65°	242	222	191	167	159	239
75°	129	111	87	74	70	136
85°	32	22	19	18	18	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	775.1	775.1	775.1	775.1	775.1
2.5°	776.8	775.1	769.2	775.1	774.5
5°	773.9	771.6	765.1	771.0	769.8
7.5°	768.1	765.7	758.1	762.8	761.6
10°	759.3	757.5	749.3	751.1	749.3
12.5°	749.3	747.0	735.3	736.4	733.5
15°	735.9	732.3	720.0	719.5	714.2
17.5°	721.8	716.5	701.9	699.0	694.9
20°	704.8	699.0	680.2	677.3	672.0
22.5°	686.1	680.2	660.3	653.9	649.8
25°	667.4	658.6	636.9	629.3	622.9
27.5°	646.3	635.8	612.9	603.0	596.5
30°	622.9	611.7	587.2	573.7	568.4
32.5°	600.0	586.6	561.4	546.2	539.2
35°	574.9	560.8	534.5	517.5	509.3
37.5°	550.9	533.9	507.0	487.1	478.9
40°	525.1	507.5	479.4	457.2	450.2
42.5°	498.2	480.0	450.8	429.7	418.6
45°	470.7	453.7	421.5	398.1	389.3
47.5°	442.0	424.4	392.2	368.2	358.3
50°	415.1	395.7	362.4	337.8	329.0
52.5°	385.8	365.9	334.9	307.9	299.1
55°	357.1	338.4	305.6	279.2	269.9
57.5°	327.8	307.9	276.3	250.6	242.4
60°	299.7	279.2	247.6	221.9	213.1
62.5°	269.9	250.6	218.4	194.9	186.2
65°	241.8	221.9	190.8	167.4	158.6
67.5°	213.7	193.8	163.9	141.7	134.6
70°	185.0	165.1	135.8	117.7	110.6
72.5°	156.9	137.6	110.6	94.3	90.2
75°	128.8	111.2	86.6	73.8	69.7
77.5°	100.1	86.1	65.6	55.6	52.1
80°	76.1	62.1	45.7	40.4	39.2
82.5°	52.7	40.4	30.4	28.7	28.1
85°	32.2	21.7	18.7	18.1	17.6
87.5°	13.5	9.4	8.8	8.8	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)