

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: P231759

Luminaire Tested: **S125-RDR-LO-27-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231759  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33920)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125-RDR-LO-27-X-0048-1-U-DD-1-W  
Description: DEFINE 5 LED LINEAR REGRESSED DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

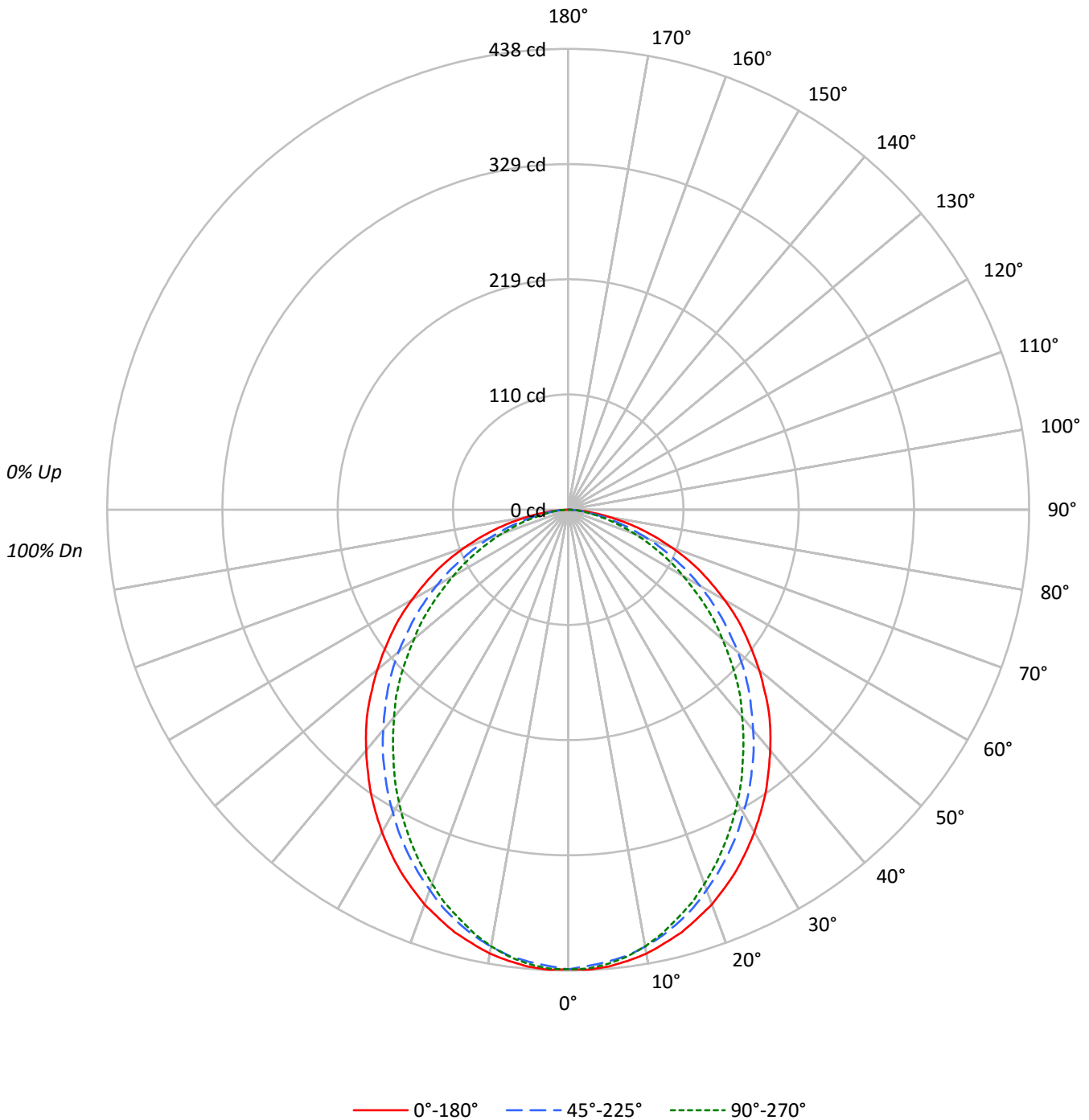
Lumens per Lamp: N/A  
Luminaire Lumens: 1048.1 lumens  
Efficiency: N/A  
Efficacy: 77.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.11 / 1.26  
Luminous Opening: Rectangular (W 0.39' x L: 3.92' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 13.6  
Input Voltage (V): 120  
Input Current (Ain): 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: 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	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61
4	84	73	64	58	82	71	63	57	69	62	56	66	60	56	64	59	55	53
5	78	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	45	39	34	32
9	58	45	37	32	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	28	38	33	28	27

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

	0°	45°	90°
0°	3078	3078	3078
5°	3083	3051	3066
10°	3065	3017	3015
15°	3034	2961	2931
20°	2994	2884	2837
25°	2941	2802	2731
30°	2878	2708	2616
35°	2816	2615	2490
40°	2747	2516	2366
45°	2684	2418	2247
50°	2596	2308	2096
55°	2514	2181	1955
60°	2418	2036	1777
65°	2311	1859	1601
70°	2143	1652	1385
75°	1933	1386	1160
80°	1611	1067	897
85°	1148	881	841



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.1	3.9
10°-20°	114.9	11.0
20°-30°	167.1	15.9
30°-40°	191.6	18.3
40°-50°	188.6	18.0
50°-60°	160.3	15.3
60°-70°	113.3	10.8
70°-80°	57.4	5.5
80°-90°	13.7	1.3
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°	323.1	30.8
0°-40°	514.8	49.1
0°-60°	863.6	82.4
0°-90°	1048.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1048.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	437	437	437	437	437	
5°	436	435	431	434	433	41
15°	416	413	406	404	402	117
25°	378	372	360	355	351	174
35°	327	319	304	295	289	205
45°	269	259	243	229	226	207
55°	205	193	178	164	159	183
65°	139	127	112	101	96	137
75°	71	63	51	44	43	75
85°	14	12	11	10	10	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	436.8	436.8	436.8	436.8	436.8
2.5°	437.6	436.8	433.9	436.8	436.4
5°	435.9	434.7	431.3	433.9	433.4
7.5°	432.6	431.3	427.6	429.3	428.4
10°	428.4	426.8	421.7	422.6	421.3
12.5°	422.2	420.5	414.6	414.2	412.6
15°	415.9	413.4	405.9	404.2	401.7
17.5°	407.5	404.6	396.3	393.8	391.3
20°	399.2	395.0	384.6	382.1	378.3
22.5°	388.8	383.7	372.9	369.1	365.4
25°	378.3	372.1	360.4	354.9	351.2
27.5°	366.2	360.4	347.4	340.3	336.6
30°	353.7	346.6	332.8	325.7	321.5
32.5°	340.7	332.8	319.0	309.8	306.1
35°	327.4	319.0	304.0	294.8	289.4
37.5°	312.8	304.0	289.4	278.9	273.5
40°	298.6	289.4	273.5	262.6	257.2
42.5°	284.4	274.8	257.6	246.4	242.2
45°	269.3	258.9	242.6	229.2	225.5
47.5°	252.6	243.0	226.7	213.8	207.9
50°	236.8	226.7	210.5	197.5	191.2
52.5°	220.5	210.9	193.3	180.8	175.8
55°	204.6	193.3	177.5	164.1	159.1
57.5°	188.7	177.0	160.8	148.2	142.0
60°	171.6	160.3	144.5	132.0	126.1
62.5°	154.5	144.1	128.6	116.5	111.5
65°	138.6	127.4	111.5	100.6	96.0
67.5°	121.9	111.9	96.0	85.6	81.4
70°	104.0	95.2	80.2	70.6	67.2
72.5°	87.3	78.5	65.6	57.2	54.3
75°	71.0	62.6	50.9	44.3	42.6
77.5°	54.7	48.0	38.0	32.6	31.3
80°	39.7	35.1	26.3	23.4	22.1
82.5°	25.9	22.1	17.5	16.7	16.3
85°	14.2	12.1	10.9	10.4	10.4
87.5°	5.0	5.4	5.0	5.0	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)