

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: P231764

Luminaire Tested: **S125-RDR-1-30-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231764  
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-1-30-X-0048-1-U-DD-1-W  
Description: DEFINE 5 LED LINEAR REGRESSED DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2651.2 lumens  
Efficiency: N/A  
Efficacy: 95.0 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

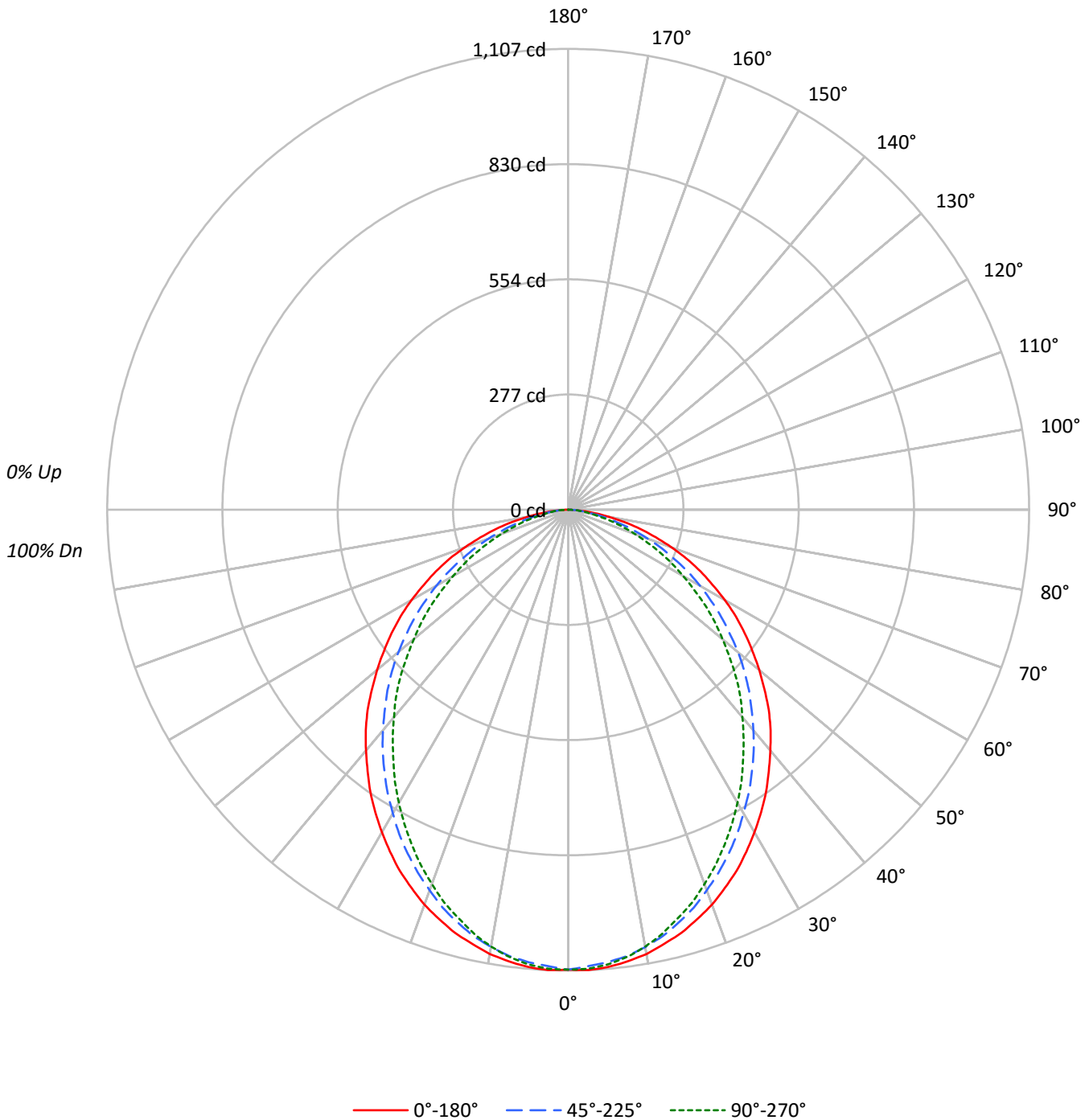
Input Watts (W): 27.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P231764

CATALOG NUMBER: S125-RDR-1-30-X-0048-1-U-DD-1-W

### Luminous Intensity Polar Plot





TEST NUMBER: P231764

CATALOG NUMBER: S125-RDR-1-30-X-0048-1-U-DD-1-W

**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°	7786	7786	7786
5°	7801	7718	7756
10°	7754	7633	7626
15°	7675	7490	7413
20°	7572	7295	7176
25°	7441	7088	6907
30°	7280	6850	6618
35°	7124	6615	6297
40°	6947	6365	5986
45°	6790	6116	5684
50°	6566	5837	5304
55°	6359	5515	4944
60°	6118	5151	4496
65°	5848	4702	4050
70°	5419	4178	3505
75°	4890	3509	2932
80°	4070	2699	2272
85°	2903	2223	2134



TEST NUMBER: P231764

CATALOG NUMBER: S125-RDR-1-30-X-0048-1-U-DD-1-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.9	3.9
10°-20°	290.7	11.0
20°-30°	422.7	15.9
30°-40°	484.8	18.3
40°-50°	477.0	18.0
50°-60°	405.4	15.3
60°-70°	286.6	10.8
70°-80°	145.3	5.5
80°-90°	34.7	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°	817.4	30.8
0°-40°	1302.2	49.1
0°-60°	2184.7	82.4
0°-90°	2651.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2651.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1103	1100	1091	1098	1096	105
15°	1052	1046	1027	1022	1016	296
25°	957	941	912	898	888	440
35°	828	807	769	746	732	518
45°	681	655	614	580	570	524
55°	518	489	449	415	402	463
65°	351	322	282	255	243	346
75°	180	158	129	112	108	190
85°	36	31	28	26	26	45
90°	0	0	0	0	0	



TEST NUMBER: P231764

CATALOG NUMBER: S125-RDR-1-30-X-0048-1-U-DD-1-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1104.9	1104.9	1104.9	1104.9	1104.9
2.5°	1107.0	1104.9	1097.5	1104.9	1103.8
5°	1102.8	1099.6	1091.1	1097.5	1096.4
7.5°	1094.3	1091.1	1081.6	1085.9	1083.7
10°	1083.7	1079.5	1066.8	1069.0	1065.8
12.5°	1067.9	1063.7	1048.9	1047.8	1043.6
15°	1052.1	1045.7	1026.7	1022.5	1016.1
17.5°	1030.9	1023.5	1002.4	996.1	989.7
20°	1009.8	999.2	972.8	966.5	957.0
22.5°	983.4	970.7	943.3	933.7	924.2
25°	957.0	941.1	911.6	897.8	888.3
27.5°	926.4	911.6	878.8	860.9	851.4
30°	894.7	876.7	841.9	823.9	813.3
32.5°	861.9	841.9	807.0	783.8	774.3
35°	828.1	807.0	769.0	745.7	732.0
37.5°	791.2	769.0	732.0	705.6	691.9
40°	755.2	732.0	691.9	664.4	650.7
42.5°	719.3	695.0	651.7	623.2	612.6
45°	681.3	654.9	613.7	579.9	570.4
47.5°	639.0	614.8	573.6	540.8	526.0
50°	598.9	573.6	532.4	499.6	483.8
52.5°	557.7	533.4	489.1	457.4	444.7
55°	517.6	489.1	448.9	415.1	402.4
57.5°	477.4	447.9	406.7	375.0	359.1
60°	434.1	405.6	365.5	333.8	319.0
62.5°	390.8	364.4	325.3	294.7	282.0
65°	350.7	322.2	282.0	254.6	242.9
67.5°	308.4	283.1	242.9	216.5	206.0
70°	263.0	240.8	202.8	178.5	170.1
72.5°	220.8	198.6	165.8	144.7	137.3
75°	179.6	158.4	128.9	112.0	107.7
77.5°	138.4	121.5	96.1	82.4	79.2
80°	100.3	88.7	66.5	59.2	56.0
82.5°	65.5	56.0	44.4	42.3	41.2
85°	35.9	30.6	27.5	26.4	26.4
87.5°	12.7	13.7	12.7	12.7	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)