

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: P231765

Luminaire Tested: **S125-RDR-1-35-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231765  
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-1-35-X-0048-1-U-DD-1-W  
Description: DEFINE 5 LED LINEAR REGRESSED DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2757.3 lumens  
Efficiency: N/A  
Efficacy: 98.8 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

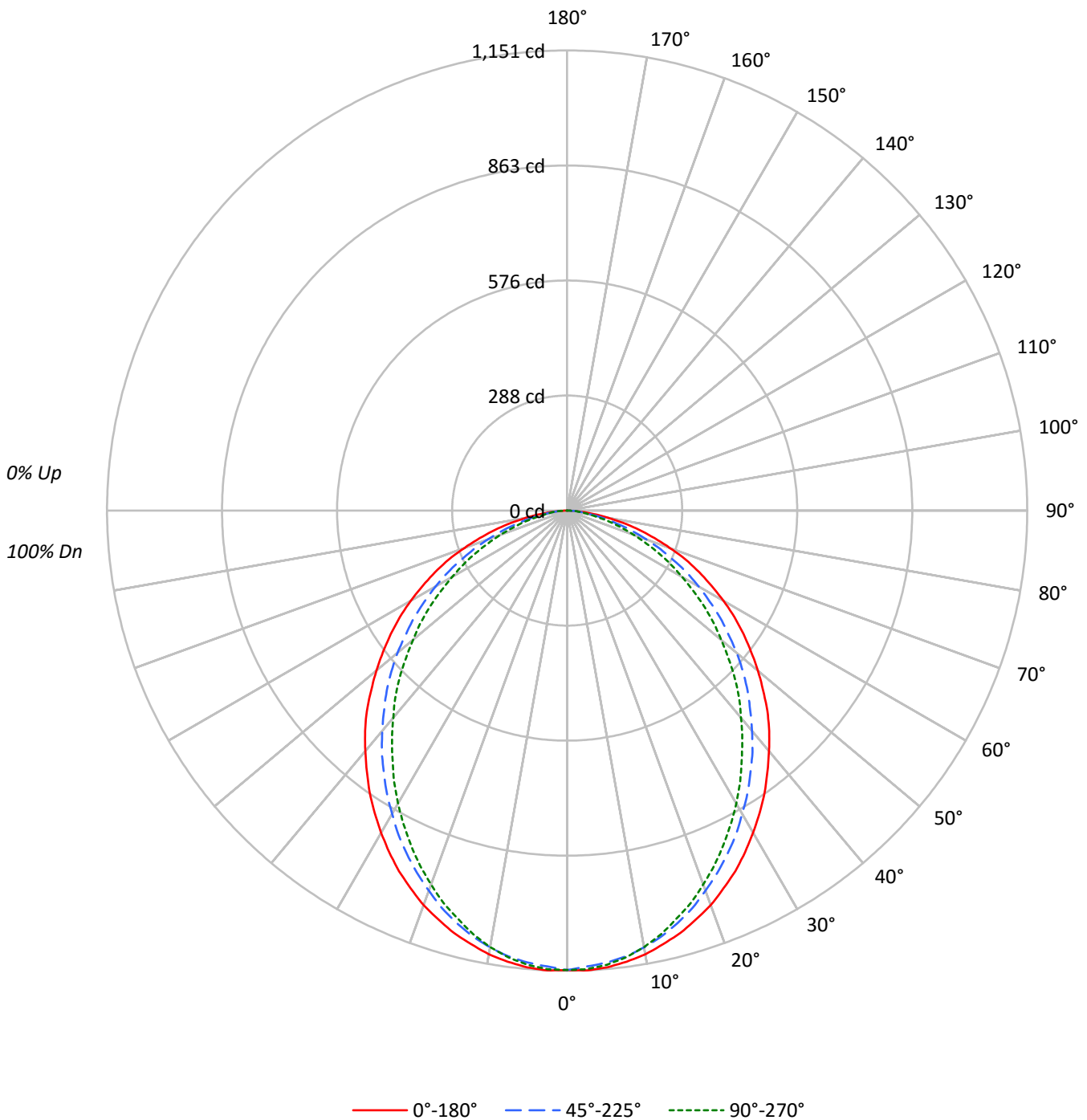
Input Watts (W): 27.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	8097	8097	8097
5°	8113	8027	8066
10°	8065	7939	7931
15°	7982	7790	7710
20°	7875	7587	7464
25°	7739	7371	7183
30°	7571	7124	6883
35°	7408	6879	6549
40°	7225	6619	6225
45°	7062	6360	5912
50°	6829	6070	5515
55°	6613	5736	5141
60°	6363	5357	4676
65°	6081	4890	4213
70°	5635	4345	3645
75°	5083	3648	3049
80°	4237	2808	2362
85°	3016	2312	2223



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.1	3.9
10°-20°	302.3	11.0
20°-30°	439.6	15.9
30°-40°	504.2	18.3
40°-50°	496.1	18.0
50°-60°	421.7	15.3
60°-70°	298.1	10.8
70°-80°	151.1	5.5
80°-90°	36.0	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°	850.1	30.8
0°-40°	1354.2	49.1
0°-60°	2272.0	82.4
0°-90°	2757.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2757.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1149	1149	1149	1149	1149	
5°	1147	1144	1135	1141	1140	109
15°	1094	1088	1068	1063	1057	308
25°	995	979	948	934	924	458
35°	861	839	800	776	761	538
45°	709	681	638	603	593	545
55°	538	509	467	432	418	481
65°	365	335	293	265	253	360
75°	187	165	134	116	112	197
85°	37	32	29	28	28	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1149.1	1149.1	1149.1	1149.1	1149.1
2.5°	1151.3	1149.1	1141.4	1149.1	1148.0
5°	1146.9	1143.6	1134.8	1141.4	1140.3
7.5°	1138.1	1134.8	1124.9	1129.3	1127.1
10°	1127.1	1122.7	1109.5	1111.7	1108.4
12.5°	1110.6	1106.2	1090.8	1089.7	1085.3
15°	1094.1	1087.5	1067.8	1063.4	1056.8
17.5°	1072.2	1064.5	1042.5	1035.9	1029.3
20°	1050.2	1039.2	1011.7	1005.2	995.3
22.5°	1022.7	1009.5	981.0	971.1	961.2
25°	995.3	978.8	948.0	933.7	923.9
27.5°	963.4	948.0	914.0	895.3	885.4
30°	930.5	911.8	875.5	856.9	845.9
32.5°	896.4	875.5	839.3	815.1	805.2
35°	861.2	839.3	799.7	775.6	761.3
37.5°	822.8	799.7	761.3	733.8	719.5
40°	785.4	761.3	719.5	691.0	676.7
42.5°	748.1	722.8	677.8	648.1	637.1
45°	708.6	681.1	638.2	603.1	593.2
47.5°	664.6	639.3	596.5	562.4	547.1
50°	622.9	596.5	553.7	519.6	503.1
52.5°	580.0	554.8	508.6	475.7	462.5
55°	538.3	508.6	466.9	431.7	418.5
57.5°	496.5	465.8	422.9	390.0	373.5
60°	451.5	421.8	380.1	347.1	331.8
62.5°	406.5	379.0	338.3	306.5	293.3
65°	364.7	335.1	293.3	264.7	252.7
67.5°	320.8	294.4	252.7	225.2	214.2
70°	273.5	250.5	210.9	185.7	176.9
72.5°	229.6	206.5	172.5	150.5	142.8
75°	186.7	164.8	134.0	116.4	112.0
77.5°	143.9	126.3	100.0	85.7	82.4
80°	104.4	92.3	69.2	61.5	58.2
82.5°	68.1	58.2	46.1	43.9	42.8
85°	37.3	31.9	28.6	27.5	27.5
87.5°	13.2	14.3	13.2	13.2	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)