

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: P231763

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231763  
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-1-27-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: 2128.2 lumens  
Efficiency: N/A  
Efficacy: 76.3 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

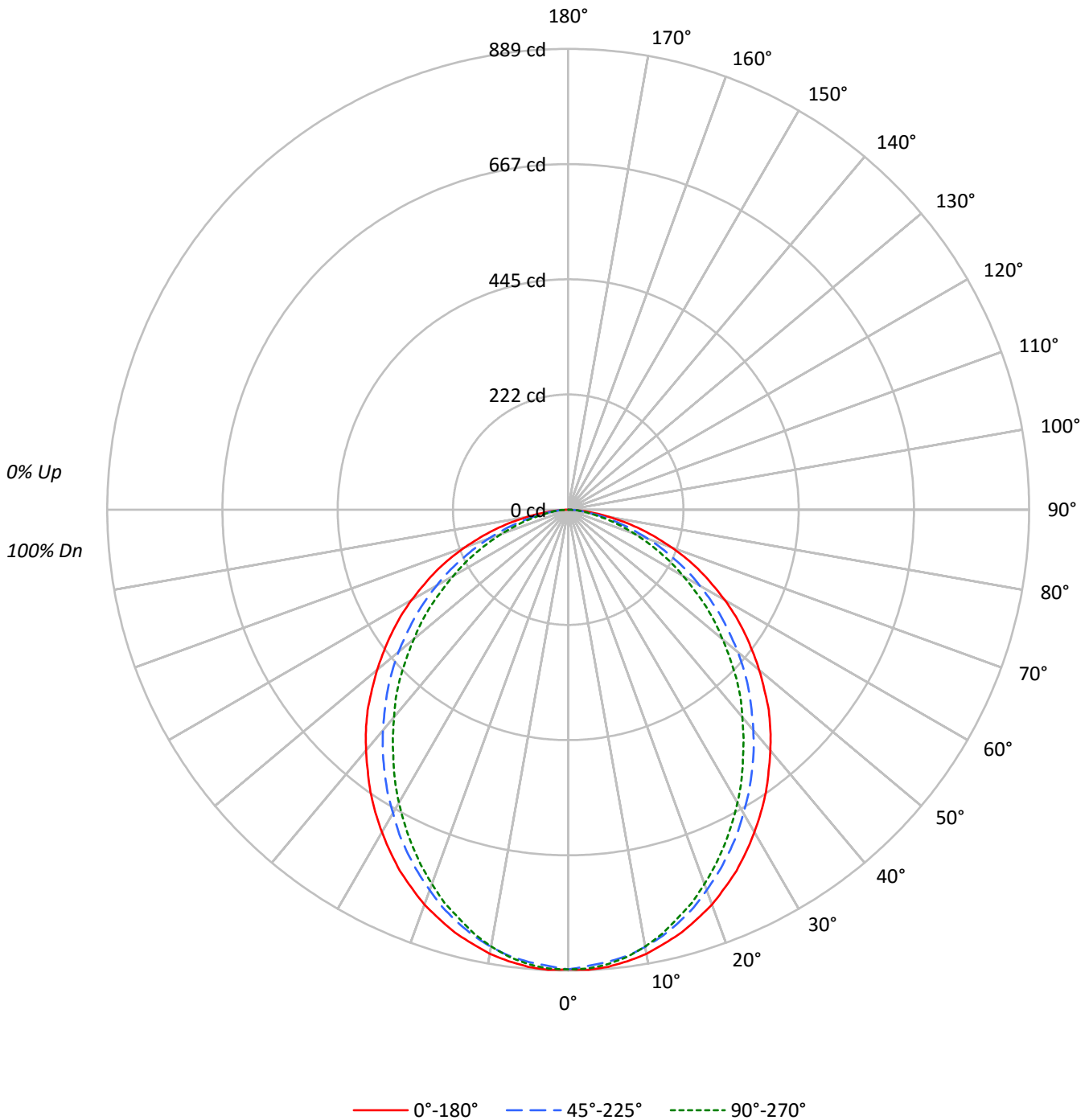
Input Watts (W): 27.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	6250	6250	6250
5°	6262	6196	6225
10°	6225	6128	6121
15°	6161	6013	5951
20°	6079	5856	5761
25°	5973	5689	5544
30°	5844	5499	5313
35°	5719	5310	5055
40°	5577	5109	4805
45°	5450	4909	4563
50°	5271	4684	4257
55°	5105	4428	3969
60°	4912	4135	3609
65°	4694	3775	3251
70°	4349	3354	2812
75°	3923	2815	2355
80°	3271	2167	1822
85°	2329	1779	1714



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.4	3.9
10°-20°	233.4	11.0
20°-30°	339.3	15.9
30°-40°	389.2	18.3
40°-50°	382.9	18.0
50°-60°	325.5	15.3
60°-70°	230.1	10.8
70°-80°	116.6	5.5
80°-90°	27.8	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°	656.1	30.8
0°-40°	1045.3	49.1
0°-60°	1753.7	82.4
0°-90°	2128.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2128.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	887	887	887	887	887	
5°	885	883	876	881	880	84
15°	844	839	824	821	816	238
25°	768	756	732	721	713	353
35°	665	648	617	599	588	415
45°	547	526	493	466	458	421
55°	416	393	360	333	323	371
65°	282	259	226	204	195	278
75°	144	127	103	90	86	152
85°	29	25	22	21	21	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	886.9	886.9	886.9	886.9	886.9
2.5°	888.6	886.9	881.0	886.9	886.1
5°	885.2	882.7	875.9	881.0	880.1
7.5°	878.4	875.9	868.3	871.6	870.0
10°	870.0	866.6	856.4	858.1	855.5
12.5°	857.2	853.8	842.0	841.1	837.7
15°	844.5	839.4	824.2	820.8	815.7
17.5°	827.6	821.6	804.7	799.6	794.5
20°	810.6	802.1	780.9	775.8	768.2
22.5°	789.4	779.2	757.2	749.5	741.9
25°	768.2	755.5	731.7	720.7	713.1
27.5°	743.6	731.7	705.5	691.0	683.4
30°	718.2	703.8	675.8	661.4	652.9
32.5°	691.9	675.8	647.8	629.1	621.5
35°	664.8	647.8	617.3	598.6	587.6
37.5°	635.1	617.3	587.6	566.4	555.4
40°	606.3	587.6	555.4	533.3	522.3
42.5°	577.4	557.9	523.2	500.3	491.8
45°	546.9	525.7	492.6	465.5	457.9
47.5°	513.0	493.5	460.4	434.1	422.3
50°	480.8	460.4	427.3	401.1	388.3
52.5°	447.7	428.2	392.6	367.1	357.0
55°	415.5	392.6	360.4	333.2	323.1
57.5°	383.3	359.5	326.4	301.0	288.3
60°	348.5	325.6	293.4	267.9	256.1
62.5°	313.7	292.5	261.2	236.6	226.4
65°	281.5	258.6	226.4	204.3	195.0
67.5°	247.6	227.2	195.0	173.8	165.3
70°	211.1	193.3	162.8	143.3	136.5
72.5°	177.2	159.4	133.1	116.2	110.2
75°	144.1	127.2	103.4	89.9	86.5
77.5°	111.1	97.5	77.2	66.1	63.6
80°	80.6	71.2	53.4	47.5	44.9
82.5°	52.6	44.9	35.6	33.9	33.1
85°	28.8	24.6	22.0	21.2	21.2
87.5°	10.2	11.0	10.2	10.2	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)