

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: P231760

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231760  
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-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: 1305.6 lumens  
Efficiency: N/A  
Efficacy: 96.0 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

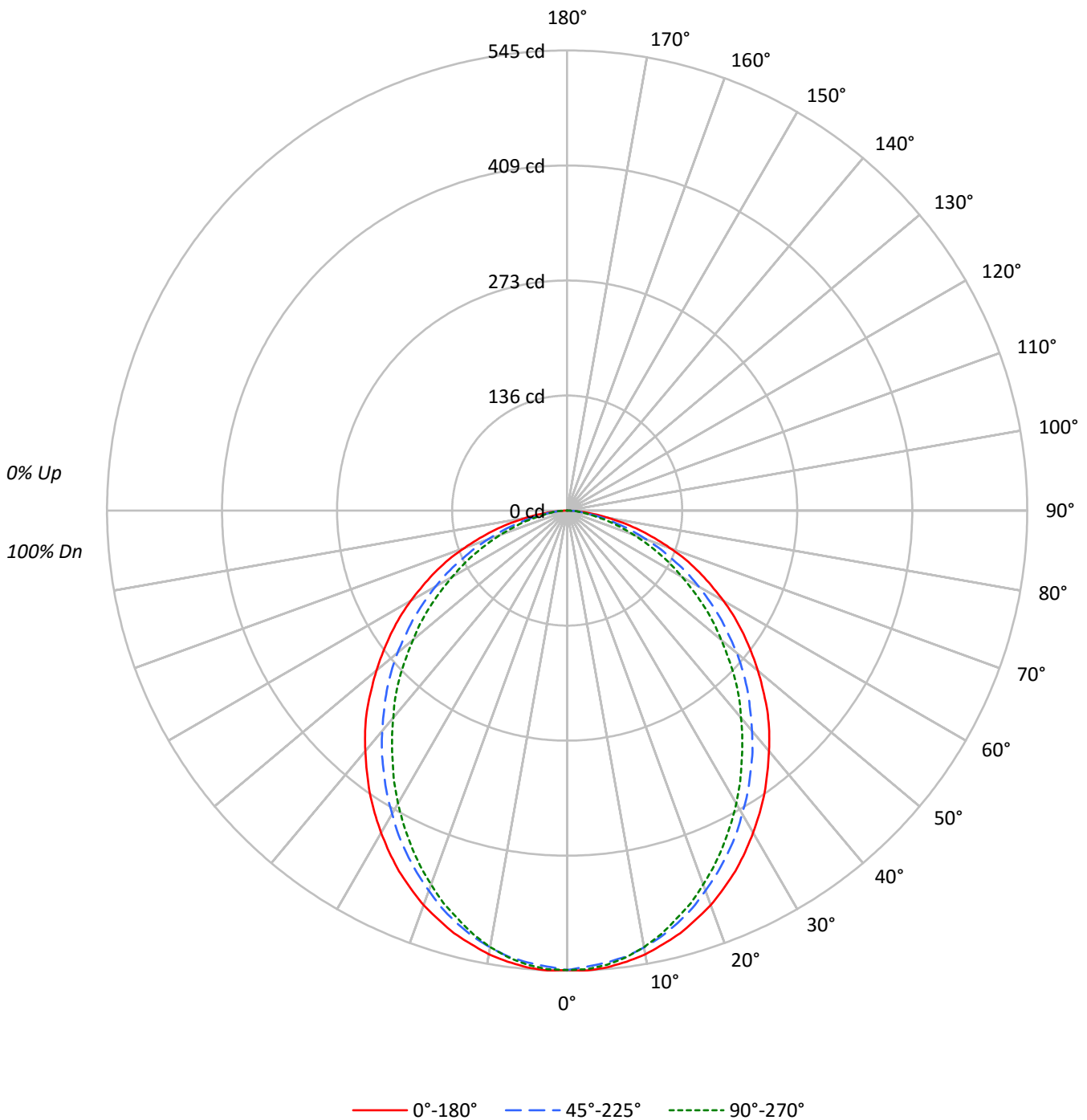
Input Watts (W): 13.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3834	3834	3834
5°	3842	3801	3820
10°	3819	3759	3756
15°	3780	3688	3651
20°	3729	3593	3534
25°	3664	3490	3402
30°	3585	3374	3259
35°	3508	3258	3101
40°	3421	3134	2947
45°	3343	3012	2799
50°	3233	2874	2611
55°	3132	2716	2435
60°	3013	2537	2214
65°	2880	2316	1994
70°	2668	2058	1724
75°	2407	1729	1446
80°	2005	1331	1120
85°	1431	1091	1051



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.2	3.9
10°-20°	143.2	11.0
20°-30°	208.2	15.9
30°-40°	238.7	18.3
40°-50°	234.9	18.0
50°-60°	199.7	15.3
60°-70°	141.1	10.8
70°-80°	71.5	5.5
80°-90°	17.1	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°	402.5	30.8
0°-40°	641.3	49.1
0°-60°	1075.9	82.4
0°-90°	1305.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1305.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	544	544	544	544	544	
5°	543	542	537	540	540	52
15°	518	515	506	504	500	146
25°	471	464	449	442	438	217
35°	408	397	379	367	360	255
45°	336	322	302	286	281	258
55°	255	241	221	204	198	228
65°	173	159	139	125	120	170
75°	88	78	64	55	53	93
85°	18	15	14	13	13	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	544.1	544.1	544.1	544.1	544.1
2.5°	545.2	544.1	540.5	544.1	543.6
5°	543.1	541.5	537.3	540.5	540.0
7.5°	538.9	537.3	532.7	534.7	533.7
10°	533.7	531.6	525.4	526.4	524.9
12.5°	525.9	523.8	516.5	516.0	513.9
15°	518.1	515.0	505.6	503.5	500.4
17.5°	507.7	504.1	493.7	490.5	487.4
20°	497.3	492.1	479.1	476.0	471.3
22.5°	484.3	478.0	464.5	459.8	455.2
25°	471.3	463.5	448.9	442.2	437.5
27.5°	456.2	448.9	432.8	423.9	419.3
30°	440.6	431.8	414.6	405.7	400.5
32.5°	424.5	414.6	397.4	386.0	381.3
35°	407.8	397.4	378.7	367.2	360.5
37.5°	389.6	378.7	360.5	347.5	340.7
40°	371.9	360.5	340.7	327.2	320.4
42.5°	354.2	342.3	321.0	306.9	301.7
45°	335.5	322.5	302.2	285.6	280.9
47.5°	314.7	302.7	282.5	266.3	259.1
50°	294.9	282.5	262.2	246.0	238.2
52.5°	274.7	262.7	240.8	225.2	219.0
55°	254.9	240.8	221.1	204.4	198.2
57.5°	235.1	220.6	200.3	184.7	176.9
60°	213.8	199.8	180.0	164.4	157.1
62.5°	192.5	179.5	160.2	145.1	138.9
65°	172.7	158.7	138.9	125.4	119.6
67.5°	151.9	139.4	119.6	106.6	101.4
70°	129.5	118.6	99.9	87.9	83.7
72.5°	108.7	97.8	81.7	71.3	67.6
75°	88.4	78.0	63.5	55.1	53.1
77.5°	68.1	59.8	47.3	40.6	39.0
80°	49.4	43.7	32.8	29.1	27.6
82.5°	32.3	27.6	21.8	20.8	20.3
85°	17.7	15.1	13.5	13.0	13.0
87.5°	6.2	6.8	6.2	6.2	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)