

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: P231701

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231701  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29677)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125-DR-LO-35-X-0048-1-U-DD-1-W  
Description: DEFINE 5 LED LINEAR 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: 1400.3 lumens  
Efficiency: N/A  
Efficacy: 103.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.15 / 1.29  
Luminous Opening: Rectangular (W 0.39' x L: 3.92' x H: 0')  
CIE Type: Direct

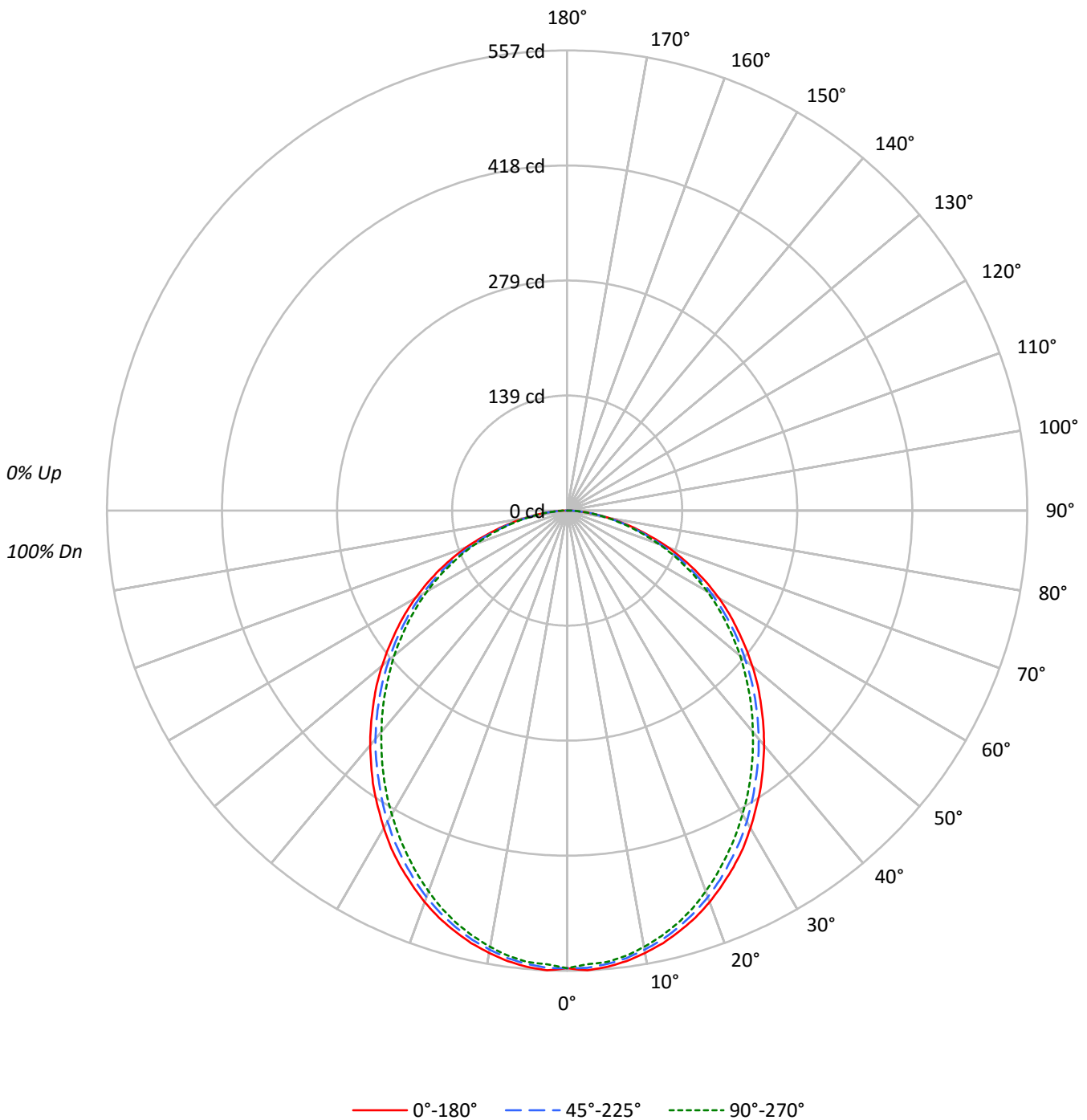
Input Watts (W): 13.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P231701

CATALOG NUMBER: S125-DR-LO-35-X-0048-1-U-DD-1-W

### Luminous Intensity Polar Plot





TEST NUMBER: P231701

CATALOG NUMBER: S125-DR-LO-35-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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	53	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	31	56	44	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26

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

	0°	45°	90°
0°	3904	3904	3904
5°	3922	3898	3881
10°	3890	3862	3837
15°	3844	3808	3772
20°	3782	3734	3678
25°	3703	3637	3569
30°	3610	3538	3454
35°	3516	3423	3339
40°	3411	3321	3217
45°	3308	3205	3106
50°	3207	3088	2996
55°	3097	2977	2880
60°	2992	2853	2755
65°	2850	2710	2603
70°	2668	2495	2415
75°	2388	2265	2186
80°	2057	1980	1940
85°	1714	1674	1674



TEST NUMBER: P231701

CATALOG NUMBER: S125-DR-LO-35-X-0048-1-U-DD-1-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.1	3.7
10°-20°	146.7	10.5
20°-30°	214.7	15.3
30°-40°	248.3	17.7
40°-50°	247.6	17.7
50°-60°	216.8	15.5
60°-70°	161.0	11.5
70°-80°	89.0	6.4
80°-90°	24.1	1.7
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°	413.5	29.5
0°-40°	661.8	47.3
0°-60°	1126.3	80.4
0°-90°	1400.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1400.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	554	554	554	554	554	
5°	554	549	551	549	549	53
15°	527	520	522	519	517	149
25°	476	469	468	460	459	219
35°	409	402	398	390	388	255
45°	332	328	322	313	312	256
55°	252	249	242	235	234	226
65°	171	167	162	158	156	169
75°	88	86	83	81	80	93
85°	21	21	21	20	21	25
90°	0	0	0	0	0	



TEST NUMBER: P231701

CATALOG NUMBER: S125-DR-LO-35-X-0048-1-U-DD-1-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	554.0	554.0	554.0	554.0	554.0
2.5°	557.0	551.1	554.0	552.5	549.6
5°	554.5	548.6	551.1	549.1	548.6
7.5°	550.1	544.2	546.6	544.2	543.7
10°	543.7	537.8	539.7	537.3	536.3
12.5°	536.3	529.9	531.9	528.4	527.4
15°	526.9	520.5	522.0	518.6	517.1
17.5°	516.6	509.7	510.7	506.3	504.8
20°	504.3	497.9	497.9	491.5	490.5
22.5°	490.5	484.1	483.6	476.2	475.2
25°	476.2	468.8	467.8	460.5	459.0
27.5°	460.9	454.1	452.1	443.7	442.2
30°	443.7	436.8	434.8	426.0	424.5
32.5°	426.0	420.6	416.6	408.3	406.8
35°	408.7	402.3	397.9	389.5	388.1
37.5°	389.5	383.6	379.7	370.3	368.9
40°	370.8	365.4	361.0	351.6	349.7
42.5°	351.6	346.7	341.3	331.9	330.9
45°	331.9	327.5	321.6	312.7	311.7
47.5°	312.7	307.8	301.9	293.5	292.0
50°	292.5	288.1	281.7	274.3	273.3
52.5°	272.3	268.4	262.5	254.6	253.6
55°	252.1	248.7	242.3	235.4	234.4
57.5°	232.4	228.5	222.6	216.2	215.2
60°	212.3	208.3	202.4	197.0	195.5
62.5°	191.6	187.6	182.2	177.3	176.3
65°	170.9	166.9	162.5	158.1	156.1
67.5°	150.2	146.8	142.3	138.4	137.4
70°	129.5	126.1	121.1	118.2	117.2
72.5°	107.9	104.9	102.4	99.5	98.5
75°	87.7	85.7	83.2	81.3	80.3
77.5°	68.5	67.0	66.0	64.0	64.0
80°	50.7	49.7	48.8	47.8	47.8
82.5°	34.5	34.0	34.0	33.0	33.5
85°	21.2	20.7	20.7	20.2	20.7
87.5°	10.3	9.8	9.8	9.4	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)