

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: P231581

Luminaire Tested: **S125-DR-LO-35-X-0048-1-U-DD-3-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231581
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29678)
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-3-W
Description: DEFINE 5 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH ASYMMETRIC LENS.
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1536.4 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.24 / 1.52
Luminous Opening: Rectangular (W 3.92' x L: 0.39' x H: 0')
CIE Type: Direct

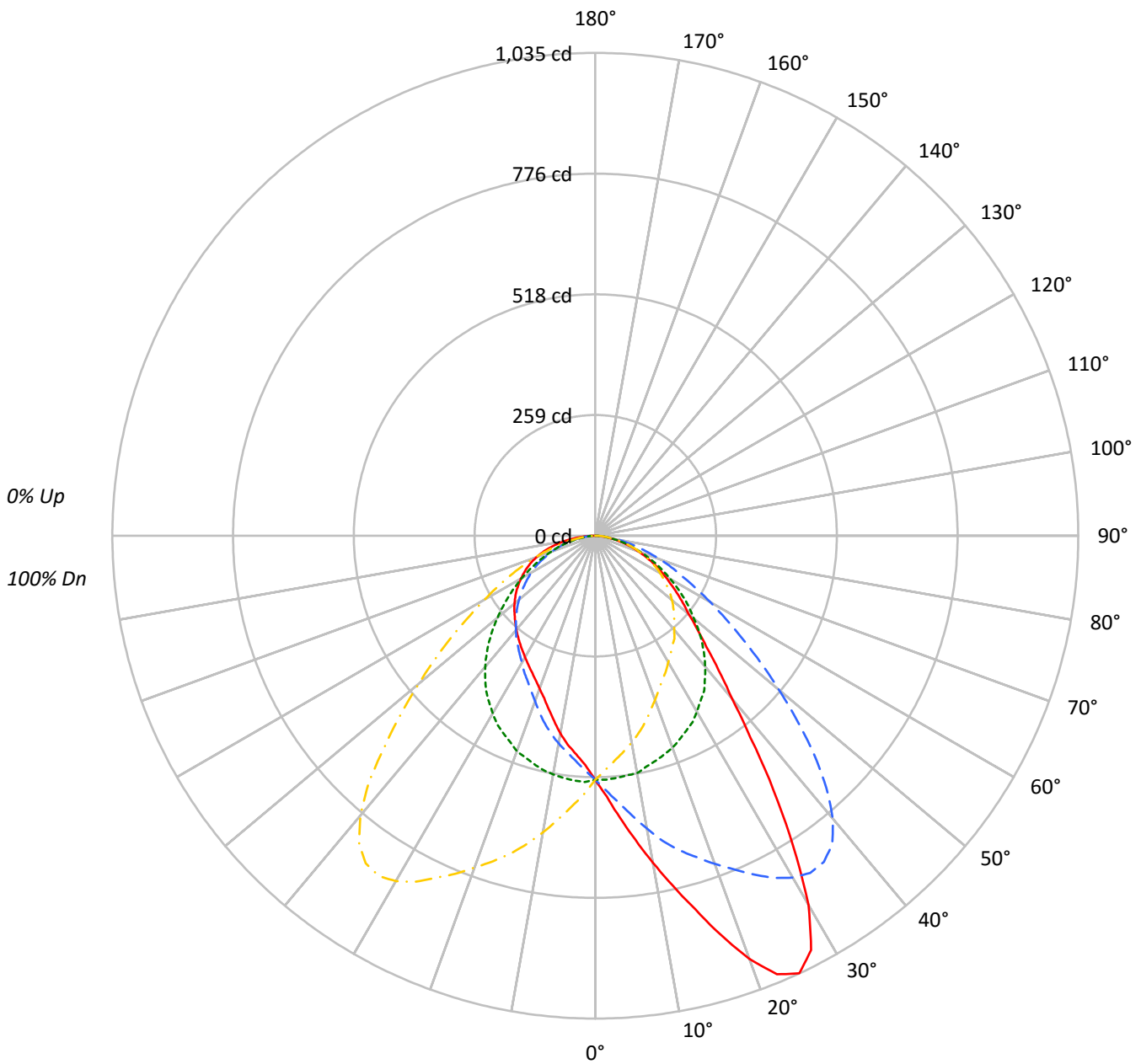
Input Watts (W): 13.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270° - · - 135°-315°



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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	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					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	78	84	79	76	81	77	74					72				
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64					61				
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55					53				
5	78	65	57	50	76	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	55	48	43	53	47	43					41				
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	48	43	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	31	57	44	37	31	43	36	31	42	36	31	41	35	31					29				
10	54	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28					26				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	3685	3685	3685	3685
5°	4292	3685	3327	3724
10°	5092	3696	3080	3718
15°	6050	3643	2809	3697
20°	7234	3626	2615	3686
25°	8045	3584	2504	3630
30°	7433	3538	2448	3575
35°	5727	3495	2423	3504
40°	4185	3370	2419	3380
45°	3352	3220	2435	3210
50°	2861	3024	2478	3002
55°	2613	2838	2535	2777
60°	2423	2617	2596	2561
65°	2234	2414	2676	2341
70°	2019	2151	2761	2081
75°	1783	1903	2788	1851
80°	1477	1558	2739	1538
85°	1075	1197	2587	1197



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.0	3.3
10°-20°	157.9	10.3
20°-30°	262.5	17.1
30°-40°	305.7	19.9
40°-50°	275.5	17.9
50°-60°	221.1	14.4
60°-70°	155.8	10.1
70°-80°	84.4	5.5
80°-90°	22.5	1.5
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°	471.4	30.7
0°-40°	777.1	50.6
0°-60°	1273.7	82.9
0°-90°	1536.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1536.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	523	523	523	523	523	
5°	607	521	470	526	607	61
15°	829	499	385	507	829	240
25°	1035	461	322	467	1035	461
35°	666	406	282	407	666	416
45°	336	323	244	322	336	265
55°	213	231	206	226	213	191
65°	134	145	160	140	134	133
75°	66	70	102	68	66	70
85°	13	15	32	15	13	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0
2.5°	559.4	554.5	547.1	531.9	523.5	507.2	501.8	496.9	491.5	494.9	503.3
5°	606.7	592.9	574.2	543.2	521.0	494.4	483.1	474.2	470.3	472.8	484.1
7.5°	657.0	637.7	604.8	555.5	518.1	482.1	466.4	455.5	451.6	454.1	467.4
10°	711.6	684.0	637.3	568.8	516.6	472.8	449.6	435.3	430.4	434.4	452.1
12.5°	769.2	730.3	670.7	576.7	506.7	457.0	432.4	413.2	406.8	412.7	435.3
15°	829.3	787.0	698.3	585.5	499.4	443.7	413.7	391.5	385.1	391.5	417.1
17.5°	898.3	841.6	722.5	592.4	491.5	429.4	392.5	370.8	364.9	371.3	397.4
20°	964.7	897.3	748.6	597.4	483.6	416.6	374.3	353.1	348.7	352.6	377.2
22.5°	1017.4	946.5	773.7	593.4	472.3	398.4	356.1	338.8	334.4	336.8	359.5
25°	1034.7	988.9	800.8	587.5	461.0	381.2	340.3	328.5	322.1	324.0	343.3
27.5°	1001.2	995.3	826.9	577.2	450.6	364.4	327.5	315.7	311.2	312.7	330.0
30°	913.5	959.8	846.1	565.4	434.8	350.1	312.7	302.4	300.9	302.4	314.2
32.5°	788.9	888.9	856.9	548.6	419.6	330.9	300.4	291.5	291.0	290.1	301.4
35°	665.8	780.6	853.4	531.4	406.3	315.7	287.6	280.7	281.7	279.7	289.1
37.5°	546.6	663.8	833.7	513.6	385.6	304.3	278.2	270.4	272.3	269.9	277.8
40°	455.0	558.5	791.9	493.0	366.4	286.6	263.0	260.5	263.0	259.5	264.5
42.5°	390.5	470.3	732.8	472.3	345.2	272.8	250.7	250.2	253.6	249.7	251.7
45°	336.4	397.9	663.4	449.6	323.1	257.1	238.4	239.3	244.3	239.3	239.3
47.5°	296.0	341.8	586.5	425.5	300.9	242.8	226.5	229.0	235.4	229.0	227.0
50°	261.0	297.9	513.2	399.9	275.8	229.5	214.2	218.2	226.0	217.7	213.2
52.5°	236.4	262.5	445.7	372.3	253.6	213.7	201.4	206.8	216.2	206.8	199.4
55°	212.7	232.4	384.6	343.3	231.0	198.5	187.6	195.5	206.3	196.0	186.2
57.5°	191.1	207.3	330.4	312.7	207.8	183.2	174.3	183.7	195.0	183.7	172.4
60°	171.9	184.2	283.7	281.2	185.7	166.9	160.5	171.4	184.2	171.4	158.1
62.5°	152.7	162.5	242.3	249.2	164.5	150.2	146.3	158.1	172.4	158.1	144.8
65°	134.0	142.3	205.9	216.7	144.8	133.5	132.0	144.3	160.5	144.3	130.0
67.5°	115.2	121.6	176.3	186.2	123.6	115.7	115.7	130.5	148.2	130.0	113.3
70°	98.0	102.9	146.3	157.1	104.4	99.5	101.0	115.2	134.0	114.3	98.5
72.5°	81.3	85.2	117.7	127.1	86.7	83.2	85.7	101.0	118.7	100.0	84.7
75°	65.5	68.5	93.6	101.9	69.9	68.0	70.9	85.7	102.4	85.2	69.9
77.5°	50.7	53.2	70.9	77.3	53.2	53.2	56.1	72.4	85.2	71.4	55.6
80°	36.4	38.4	51.2	55.6	38.4	39.4	42.8	55.6	67.5	55.2	41.9
82.5°	24.1	25.6	34.0	36.9	25.6	26.6	30.0	42.4	49.2	40.4	29.5
85°	13.3	14.3	19.7	21.2	14.8	16.3	19.2	26.6	32.0	27.6	18.7
87.5°	4.9	5.4	8.4	8.9	6.4	7.4	9.8	14.3	16.7	14.8	9.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	523.0	523.0	523.0	523.0	523.0	523.0
2.5°	509.7	528.4	537.3	554.0	561.4	559.4
5°	496.9	526.4	549.6	582.6	600.8	606.7
7.5°	485.1	523.5	562.9	613.6	647.6	657.0
10°	470.8	519.6	575.2	645.6	694.9	711.6
12.5°	460.0	514.6	588.5	676.7	744.6	769.2
15°	445.2	506.7	595.9	705.7	795.8	829.3
17.5°	431.4	498.4	602.8	731.8	853.0	898.3
20°	416.1	491.5	605.7	756.9	911.6	964.7
22.5°	399.9	478.2	604.3	784.5	965.2	1017.4
25°	381.7	466.9	597.4	809.1	1000.2	1034.7
27.5°	364.9	455.5	586.5	836.2	1003.7	1001.2
30°	348.7	439.3	573.7	854.9	964.7	913.5
32.5°	331.9	423.5	556.5	864.3	882.5	788.9
35°	316.2	407.3	539.3	857.4	771.7	665.8
37.5°	300.9	387.6	520.5	831.3	651.5	546.6
40°	285.6	367.4	500.3	782.5	545.2	455.0
42.5°	271.8	345.2	479.7	719.0	459.0	390.5
45°	256.6	322.1	456.0	638.2	391.5	336.4
47.5°	243.8	297.9	431.9	563.9	336.4	296.0
50°	228.5	273.8	405.3	493.9	292.5	261.0
52.5°	212.3	249.7	376.2	430.9	257.6	236.4
55°	196.5	226.0	346.2	371.8	229.0	212.7
57.5°	182.2	203.9	314.7	319.1	203.9	191.1
60°	165.0	181.7	282.2	273.3	180.2	171.9
62.5°	149.7	160.5	249.2	234.4	158.6	152.7
65°	131.5	140.4	216.2	199.9	138.9	134.0
67.5°	113.8	119.7	185.2	166.9	118.7	115.2
70°	99.0	101.0	153.2	138.4	100.0	98.0
72.5°	82.7	85.2	125.6	110.8	82.7	81.3
75°	67.0	68.0	98.5	87.7	67.0	65.5
77.5°	52.2	52.2	73.9	66.0	51.2	50.7
80°	38.4	37.9	52.7	47.3	37.4	36.4
82.5°	26.1	25.1	34.5	31.0	24.6	24.1
85°	15.8	14.8	19.7	18.2	13.8	13.3
87.5°	7.9	7.4	8.4	7.4	4.9	4.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)