

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: P231582

Luminaire Tested: **S125-DR-LO-40-X-0048-1-U-DD-3-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231582
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-40-X-0048-1-U-DD-3-W
Description: DEFINE 5 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH ASYMMETRIC LENS.
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1565.9 lumens
Efficiency: N/A
Efficacy: 115.1 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

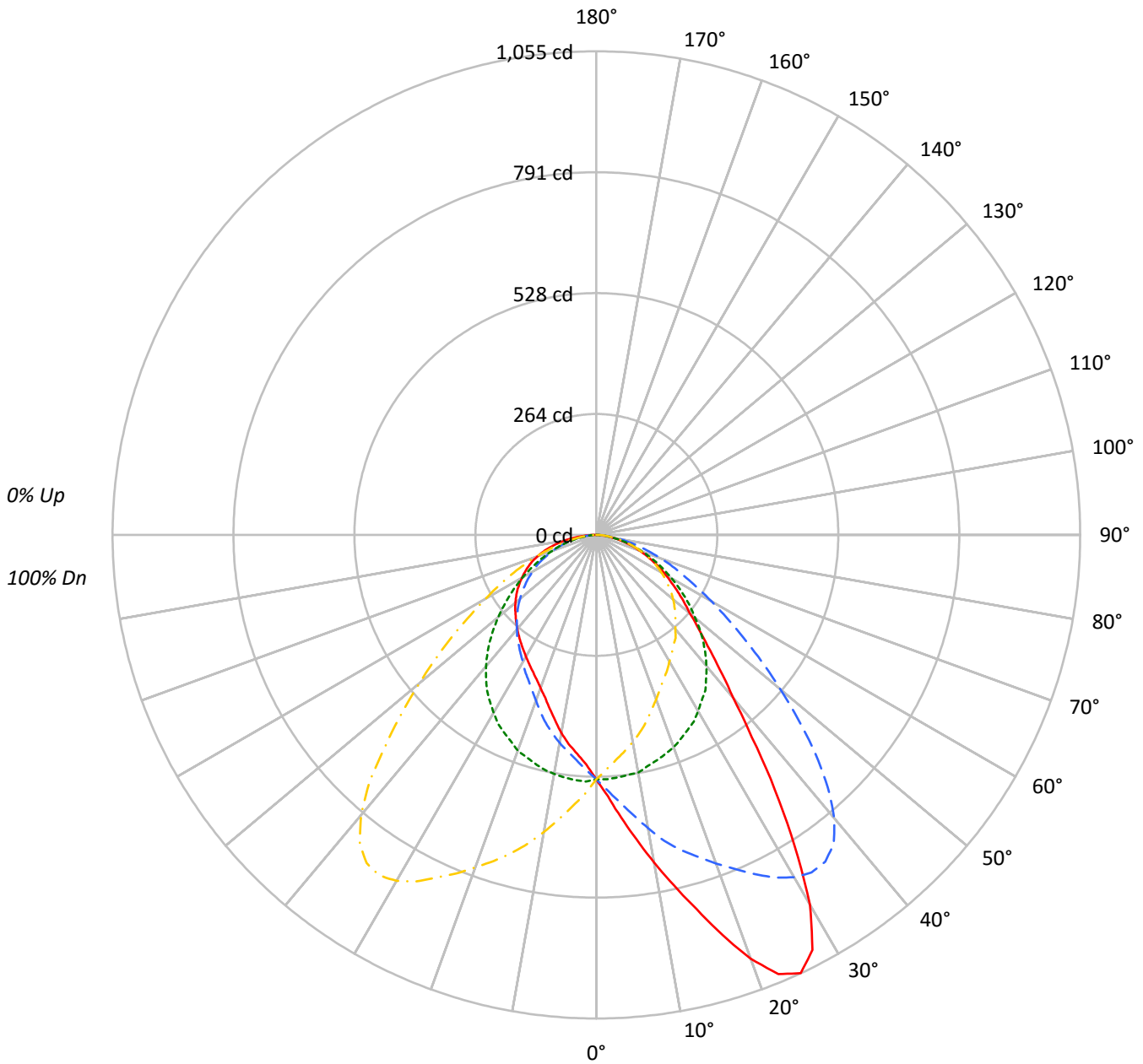
Input Watts (W): 13.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3757	3757	3757	3757
5°	4374	3757	3391	3796
10°	5190	3767	3139	3789
15°	6167	3713	2863	3768
20°	7374	3696	2665	3756
25°	8200	3653	2553	3699
30°	7576	3606	2496	3643
35°	5838	3562	2470	3571
40°	4266	3435	2465	3444
45°	3416	3282	2481	3272
50°	2916	3082	2526	3060
55°	2664	2892	2584	2831
60°	2469	2666	2645	2610
65°	2276	2461	2728	2386
70°	2058	2192	2812	2120
75°	1819	1941	2842	1887
80°	1506	1591	2792	1566
85°	1100	1221	2636	1221



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.0	3.3
10°-20°	161.0	10.3
20°-30°	267.5	17.1
30°-40°	311.5	19.9
40°-50°	280.8	17.9
50°-60°	225.4	14.4
60°-70°	158.8	10.1
70°-80°	86.0	5.5
80°-90°	22.9	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°	480.5	30.7
0°-40°	792.0	50.6
0°-60°	1298.2	82.9
0°-90°	1565.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1565.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	533	533	533	533	533	
5°	618	531	479	537	618	62
15°	845	509	392	516	845	245
25°	1055	470	328	476	1055	470
35°	679	414	287	415	679	424
45°	343	329	249	328	343	270
55°	217	235	210	230	217	195
65°	136	148	164	143	136	135
75°	67	71	104	69	67	71
85°	14	15	33	15	14	17
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°	533.1	533.1	533.1	533.1	533.1	533.1	533.1	533.1	533.1	533.1	533.1
2.5°	570.2	565.2	557.7	542.1	533.6	517.0	511.5	506.5	500.9	504.4	513.0
5°	618.4	604.3	585.3	553.6	531.1	503.9	492.4	483.4	479.4	481.9	493.4
7.5°	669.6	650.0	616.4	566.2	528.0	491.4	475.3	464.3	460.3	462.8	476.3
10°	725.3	697.2	649.5	579.7	526.5	481.9	458.3	443.7	438.7	442.7	460.8
12.5°	784.0	744.4	683.6	587.8	516.5	465.8	440.7	421.1	414.6	420.6	443.7
15°	845.3	802.1	711.7	596.8	509.0	452.2	421.6	399.0	392.5	399.0	425.1
17.5°	915.5	857.8	736.3	603.8	500.9	437.7	400.0	378.0	371.9	378.5	405.1
20°	983.3	914.5	762.9	608.9	492.9	424.6	381.5	359.9	355.4	359.4	384.5
22.5°	1037.0	964.7	788.5	604.8	481.4	406.1	362.9	345.3	340.8	343.3	366.4
25°	1054.6	1007.9	816.2	598.8	469.8	388.5	346.8	334.8	328.3	330.3	349.9
27.5°	1020.4	1014.4	842.8	588.3	459.3	371.4	333.8	321.7	317.2	318.7	336.3
30°	931.1	978.3	862.3	576.2	443.2	356.9	318.7	308.2	306.7	308.2	320.2
32.5°	804.1	906.0	873.4	559.2	427.7	337.3	306.2	297.1	296.6	295.6	307.2
35°	678.6	795.6	869.9	541.6	414.1	321.7	293.1	286.1	287.1	285.1	294.6
37.5°	557.2	676.6	849.8	523.5	393.0	310.2	283.6	275.6	277.6	275.1	283.1
40°	463.8	569.2	807.1	502.4	373.4	292.1	268.0	265.5	268.0	264.5	269.5
42.5°	398.0	479.4	746.9	481.4	351.9	278.1	255.5	255.0	258.5	254.5	256.5
45°	342.8	405.6	676.1	458.3	329.3	262.0	242.9	243.9	249.0	243.9	243.9
47.5°	301.7	348.3	597.8	433.7	306.7	247.5	230.9	233.4	239.9	233.4	231.4
50°	266.0	303.7	523.0	407.6	281.1	233.9	218.3	222.4	230.4	221.9	217.3
52.5°	240.9	267.5	454.3	379.5	258.5	217.8	205.3	210.8	220.4	210.8	203.3
55°	216.8	236.9	392.0	349.9	235.4	202.3	191.2	199.3	210.3	199.8	189.7
57.5°	194.8	211.3	336.8	318.7	211.8	186.7	177.7	187.2	198.8	187.2	175.7
60°	175.2	187.7	289.1	286.6	189.2	170.2	163.6	174.7	187.7	174.7	161.1
62.5°	155.6	165.6	247.0	254.0	167.6	153.1	149.1	161.1	175.7	161.1	147.6
65°	136.5	145.1	209.8	220.9	147.6	136.0	134.5	147.1	163.6	147.1	132.5
67.5°	117.5	124.0	179.7	189.7	126.0	118.0	118.0	133.0	151.1	132.5	115.4
70°	99.9	104.9	149.1	160.1	106.4	101.4	102.9	117.5	136.5	116.4	100.4
72.5°	82.8	86.8	120.0	129.5	88.3	84.8	87.3	102.9	121.0	101.9	86.3
75°	66.8	69.8	95.4	103.9	71.3	69.3	72.3	87.3	104.4	86.8	71.3
77.5°	51.7	54.2	72.3	78.8	54.2	54.2	57.2	73.8	86.8	72.8	56.7
80°	37.1	39.2	52.2	56.7	39.2	40.2	43.7	56.7	68.8	56.2	42.7
82.5°	24.6	26.1	34.6	37.6	26.1	27.1	30.6	43.2	50.2	41.2	30.1
85°	13.6	14.6	20.1	21.6	15.1	16.6	19.6	27.1	32.6	28.1	19.1
87.5°	5.0	5.5	8.5	9.0	6.5	7.5	10.0	14.6	17.1	15.1	10.0
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°	533.1	533.1	533.1	533.1	533.1	533.1
2.5°	519.5	538.6	547.6	564.7	572.2	570.2
5°	506.5	536.6	560.2	593.8	612.4	618.4
7.5°	494.4	533.6	573.7	625.4	660.0	669.6
10°	479.9	529.5	586.3	658.0	708.2	725.3
12.5°	468.8	524.5	599.8	689.7	758.9	784.0
15°	453.8	516.5	607.3	719.3	811.1	845.3
17.5°	439.7	508.0	614.4	745.9	869.4	915.5
20°	424.1	500.9	617.4	771.5	929.1	983.3
22.5°	407.6	487.4	615.9	799.6	983.8	1037.0
25°	389.0	475.8	608.9	824.7	1019.4	1054.6
27.5°	371.9	464.3	597.8	852.3	1023.0	1020.4
30°	355.4	447.7	584.8	871.4	983.3	931.1
32.5°	338.3	431.7	567.2	880.9	899.5	804.1
35°	322.2	415.1	549.6	873.9	786.5	678.6
37.5°	306.7	395.0	530.5	847.3	664.1	557.2
40°	291.1	374.4	510.0	797.6	555.6	463.8
42.5°	277.1	351.9	488.9	732.8	467.8	398.0
45°	261.5	328.3	464.8	650.5	399.0	342.8
47.5°	248.5	303.7	440.2	574.7	342.8	301.7
50°	232.9	279.1	413.1	503.4	298.2	266.0
52.5°	216.3	254.5	383.5	439.2	262.5	240.9
55°	200.3	230.4	352.9	379.0	233.4	216.8
57.5°	185.7	207.8	320.7	325.3	207.8	194.8
60°	168.1	185.2	287.6	278.6	183.7	175.2
62.5°	152.6	163.6	254.0	238.9	161.6	155.6
65°	134.0	143.1	220.4	203.8	141.5	136.5
67.5°	115.9	122.0	188.7	170.2	121.0	117.5
70°	100.9	102.9	156.1	141.0	101.9	99.9
72.5°	84.3	86.8	128.0	112.9	84.3	82.8
75°	68.3	69.3	100.4	89.3	68.3	66.8
77.5°	53.2	53.2	75.3	67.3	52.2	51.7
80°	39.2	38.6	53.7	48.2	38.1	37.1
82.5°	26.6	25.6	35.1	31.6	25.1	24.6
85°	16.1	15.1	20.1	18.6	14.1	13.6
87.5°	8.0	7.5	8.5	7.5	5.0	5.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)