

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: P231579

Luminaire Tested: **S125-DR-LO-27-X-0048-1-U-DD-3-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231579
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-27-X-0048-1-U-DD-3-W
Description: DEFINE 5 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH ASYMMETRIC LENS.
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1185.9 lumens
Efficiency: N/A
Efficacy: 87.2 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

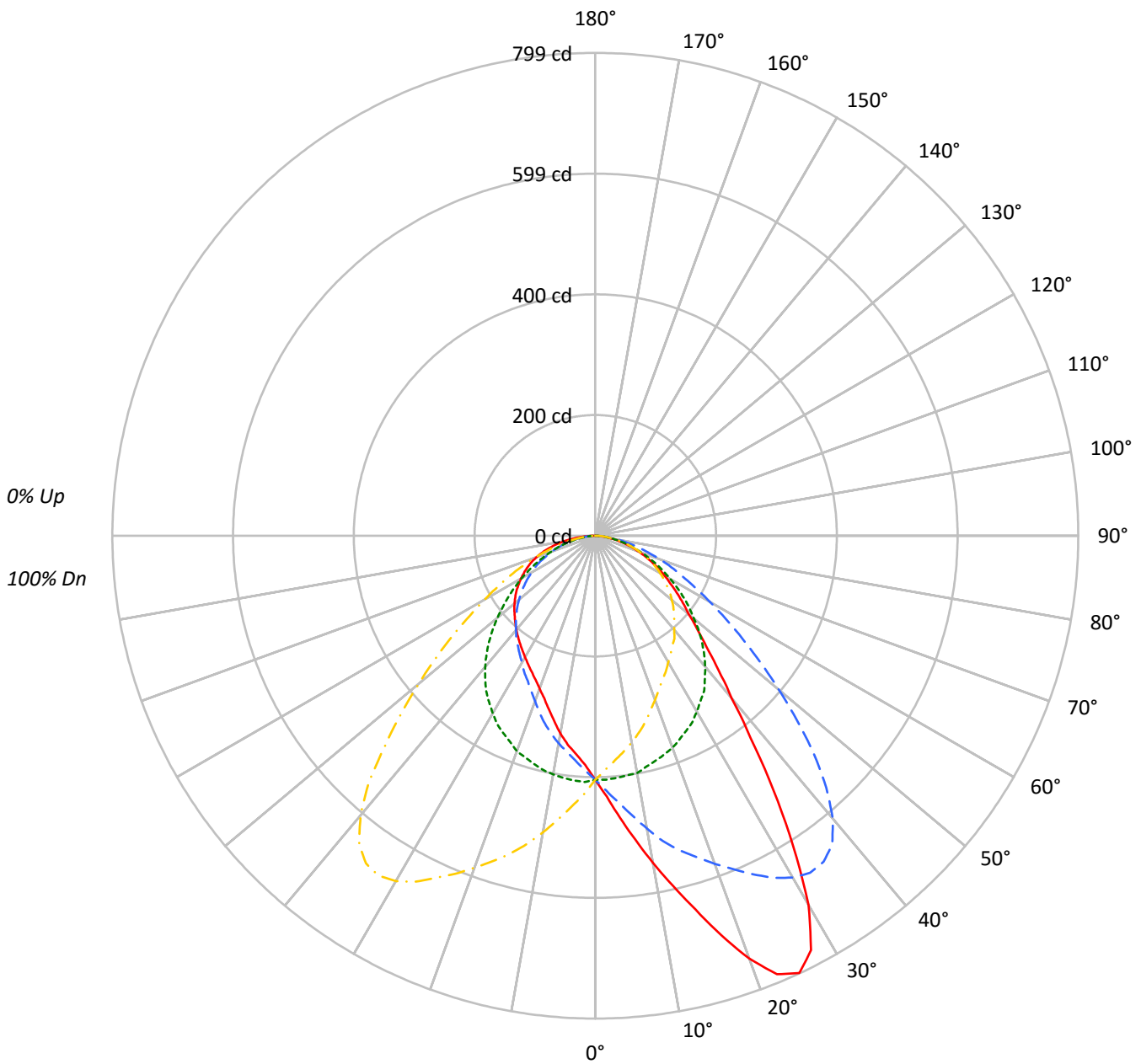
Input Watts (W): 13.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	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°	2845	2845	2845	2845
5°	3313	2845	2568	2874
10°	3930	2853	2377	2869
15°	4670	2812	2168	2853
20°	5584	2799	2018	2845
25°	6209	2766	1933	2801
30°	5737	2731	1889	2759
35°	4421	2698	1870	2705
40°	3231	2601	1867	2609
45°	2587	2485	1879	2477
50°	2209	2334	1913	2316
55°	2017	2191	1957	2144
60°	1870	2020	2004	1977
65°	1724	1864	2066	1806
70°	1558	1661	2130	1605
75°	1378	1470	2154	1429
80°	1140	1201	2114	1189
85°	833	922	1997	922



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.4	3.3
10°-20°	121.9	10.3
20°-30°	202.6	17.1
30°-40°	235.9	19.9
40°-50°	212.6	17.9
50°-60°	170.7	14.4
60°-70°	120.3	10.1
70°-80°	65.1	5.5
80°-90°	17.4	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°	363.9	30.7
0°-40°	599.8	50.6
0°-60°	983.1	82.9
0°-90°	1185.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1185.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	404	404	404	404	404	
5°	468	402	363	406	468	47
15°	640	385	297	391	640	185
25°	799	356	249	360	799	356
35°	514	314	217	314	514	321
45°	260	249	188	249	260	205
55°	164	178	159	174	164	148
65°	103	112	124	108	103	102
75°	51	54	79	52	51	54
85°	10	11	25	11	10	13
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°	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7
2.5°	431.8	428.0	422.3	410.5	404.1	391.5	387.3	383.5	379.4	382.0	388.5
5°	468.3	457.7	443.2	419.3	402.2	381.6	372.9	366.0	363.0	364.9	373.7
7.5°	507.1	492.2	466.8	428.8	399.9	372.1	360.0	351.6	348.6	350.5	360.7
10°	549.3	528.0	491.9	439.0	398.7	364.9	347.0	336.0	332.2	335.3	348.9
12.5°	593.7	563.7	517.7	445.1	391.1	352.7	333.7	318.9	314.0	318.5	336.0
15°	640.1	607.4	539.0	452.0	385.4	342.5	319.3	302.2	297.2	302.2	322.0
17.5°	693.3	649.6	557.6	457.3	379.4	331.5	303.0	286.2	281.7	286.6	306.8
20°	744.6	692.6	577.8	461.1	373.3	321.6	288.9	272.5	269.1	272.2	291.2
22.5°	785.3	730.6	597.2	458.0	364.5	307.5	274.8	261.5	258.1	260.0	277.5
25°	798.6	763.3	618.1	453.5	355.8	294.2	262.7	253.5	248.6	250.1	264.9
27.5°	772.8	768.2	638.2	445.5	347.8	281.3	252.8	243.7	240.2	241.4	254.7
30°	705.1	740.8	653.0	436.4	335.6	270.3	241.4	233.4	232.2	233.4	242.5
32.5°	608.9	686.1	661.4	423.4	323.9	255.4	231.9	225.0	224.6	223.9	232.6
35°	513.9	602.5	658.7	410.1	313.6	243.7	222.0	216.7	217.4	215.9	223.1
37.5°	421.9	512.4	643.5	396.5	297.6	234.9	214.8	208.7	210.2	208.3	214.4
40°	351.2	431.0	611.2	380.5	282.8	221.2	203.0	201.1	203.0	200.3	204.1
42.5°	301.4	363.0	565.6	364.5	266.5	210.6	193.5	193.1	195.8	192.7	194.2
45°	259.6	307.1	512.0	347.0	249.4	198.4	184.0	184.7	188.5	184.7	184.7
47.5°	228.4	263.8	452.7	328.4	232.2	187.4	174.9	176.8	181.7	176.8	175.2
50°	201.5	230.0	396.1	308.7	212.9	177.1	165.3	168.4	174.5	168.0	164.6
52.5°	182.5	202.6	344.0	287.4	195.8	165.0	155.5	159.6	166.9	159.6	153.9
55°	164.2	179.4	296.9	264.9	178.3	153.2	144.8	150.9	159.3	151.3	143.7
57.5°	147.5	160.0	255.1	241.4	160.4	141.4	134.6	141.8	150.5	141.8	133.0
60°	132.7	142.2	218.9	217.0	143.3	128.9	123.9	132.3	142.2	132.3	122.0
62.5°	117.8	125.4	187.0	192.3	127.0	115.9	112.9	122.0	133.0	122.0	111.8
65°	103.4	109.9	158.9	167.3	111.8	103.0	101.9	111.4	123.9	111.4	100.4
67.5°	88.9	93.9	136.1	143.7	95.4	89.3	89.3	100.7	114.4	100.4	87.4
70°	75.6	79.4	112.9	121.3	80.6	76.8	77.9	88.9	103.4	88.2	76.0
72.5°	62.7	65.8	90.8	98.1	66.9	64.2	66.1	77.9	91.6	77.2	65.4
75°	50.6	52.8	72.2	78.7	54.0	52.5	54.7	66.1	79.1	65.8	54.0
77.5°	39.2	41.1	54.7	59.7	41.1	41.1	43.3	55.9	65.8	55.1	43.0
80°	28.1	29.6	39.5	43.0	29.6	30.4	33.1	43.0	52.1	42.6	32.3
82.5°	18.6	19.8	26.2	28.5	19.8	20.5	23.2	32.7	38.0	31.2	22.8
85°	10.3	11.0	15.2	16.3	11.4	12.5	14.8	20.5	24.7	21.3	14.4
87.5°	3.8	4.2	6.5	6.8	4.9	5.7	7.6	11.0	12.9	11.4	7.6
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°	403.7	403.7	403.7	403.7	403.7	403.7
2.5°	393.4	407.9	414.7	427.6	433.3	431.8
5°	383.5	406.3	424.2	449.7	463.7	468.3
7.5°	374.4	404.1	434.5	473.6	499.8	507.1
10°	363.4	401.0	444.0	498.3	536.3	549.3
12.5°	355.0	397.2	454.2	522.3	574.7	593.7
15°	343.6	391.1	459.9	544.7	614.3	640.1
17.5°	333.0	384.7	465.3	564.8	658.4	693.3
20°	321.2	379.4	467.5	584.2	703.6	744.6
22.5°	308.7	369.1	466.4	605.5	745.0	785.3
25°	294.6	360.3	461.1	624.5	772.0	798.6
27.5°	281.7	351.6	452.7	645.4	774.7	772.8
30°	269.1	339.1	442.8	659.9	744.6	705.1
32.5°	256.2	326.9	429.5	667.1	681.2	608.9
35°	244.0	314.4	416.2	661.8	595.6	513.9
37.5°	232.2	299.1	401.8	641.6	502.9	421.9
40°	220.5	283.6	386.2	604.0	420.8	351.2
42.5°	209.8	266.5	370.2	555.0	354.3	301.4
45°	198.0	248.6	352.0	492.6	302.2	259.6
47.5°	188.2	230.0	333.4	435.2	259.6	228.4
50°	176.4	211.3	312.8	381.3	225.8	201.5
52.5°	163.8	192.7	290.4	332.6	198.8	182.5
55°	151.7	174.5	267.2	287.0	176.8	164.2
57.5°	140.6	157.4	242.9	246.3	157.4	147.5
60°	127.3	140.3	217.8	211.0	139.1	132.7
62.5°	115.6	123.9	192.3	180.9	122.4	117.8
65°	101.5	108.3	166.9	154.3	107.2	103.4
67.5°	87.8	92.4	142.9	128.9	91.6	88.9
70°	76.4	77.9	118.2	106.8	77.2	75.6
72.5°	63.9	65.8	96.9	85.5	63.9	62.7
75°	51.7	52.5	76.0	67.7	51.7	50.6
77.5°	40.3	40.3	57.0	50.9	39.5	39.2
80°	29.6	29.3	40.7	36.5	28.9	28.1
82.5°	20.1	19.4	26.6	23.9	19.0	18.6
85°	12.2	11.4	15.2	14.1	10.6	10.3
87.5°	6.1	5.7	6.5	5.7	3.8	3.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)