

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: P231583

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231583
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-1-27-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: 2408.0 lumens
Efficiency: N/A
Efficacy: 86.3 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

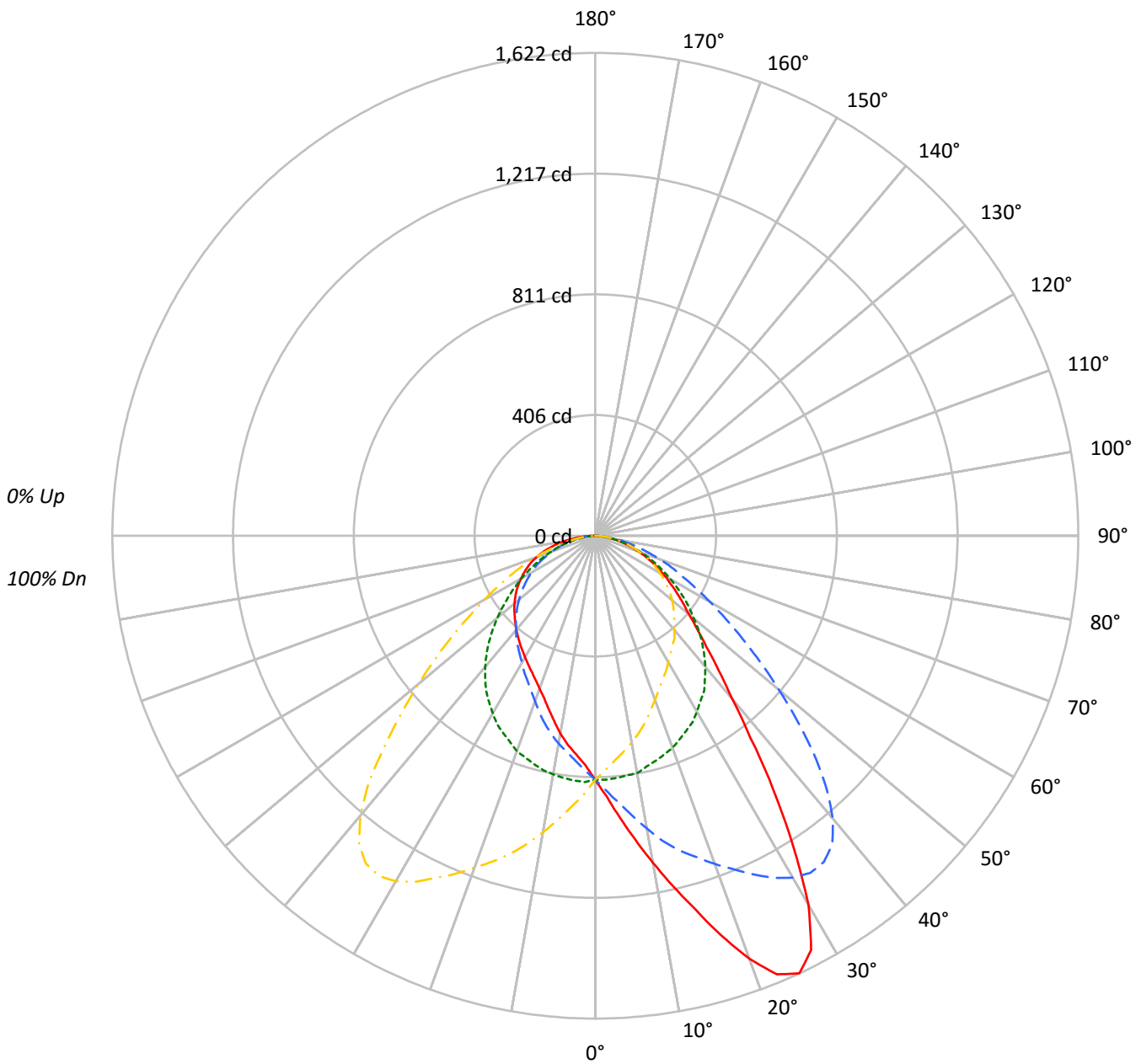
Input Watts (W): 27.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5776	5776	5776	5776
5°	6726	5776	5214	5836
10°	7980	5794	4827	5827
15°	9482	5710	4403	5794
20°	11339	5684	4098	5776
25°	12609	5618	3925	5689
30°	11650	5545	3837	5602
35°	8977	5478	3798	5491
40°	6561	5283	3792	5297
45°	5254	5046	3815	5031
50°	4485	4738	3884	4705
55°	4096	4447	3973	4353
60°	3797	4101	4069	4014
65°	3500	3783	4195	3668
70°	3165	3371	4325	3259
75°	2796	2984	4370	2900
80°	2317	2443	4289	2410
85°	1682	1876	4059	1876



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.0	3.3
10°-20°	247.5	10.3
20°-30°	411.4	17.1
30°-40°	479.1	19.9
40°-50°	431.7	17.9
50°-60°	346.5	14.4
60°-70°	244.2	10.1
70°-80°	132.3	5.5
80°-90°	35.2	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°	738.9	30.7
0°-40°	1218.0	50.6
0°-60°	1996.2	82.9
0°-90°	2408.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2408.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	820	820	820	820	820	
5°	951	817	737	825	951	96
15°	1300	783	604	794	1300	376
25°	1622	722	505	732	1622	723
35°	1044	637	442	638	1044	652
45°	527	506	383	505	527	416
55°	333	362	323	354	333	300
65°	210	227	252	220	210	208
75°	103	110	160	106	103	109
85°	21	23	50	23	21	26
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°	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7	819.7
2.5°	876.8	869.1	857.5	833.6	820.5	795.0	786.5	778.8	770.3	775.7	788.8
5°	950.9	929.3	900.0	851.4	816.6	774.9	757.2	743.3	737.1	741.0	758.7
7.5°	1029.7	999.6	947.8	870.7	812.0	755.6	730.9	714.0	707.8	711.6	732.5
10°	1115.3	1072.1	998.8	891.5	809.7	741.0	704.7	682.3	674.6	680.8	708.6
12.5°	1205.6	1144.7	1051.3	903.8	794.2	716.3	677.7	647.6	637.6	646.8	682.3
15°	1299.8	1233.4	1094.5	917.7	782.7	695.4	648.4	613.6	603.6	613.6	653.8
17.5°	1407.9	1319.1	1132.3	928.5	770.3	673.1	615.2	581.2	571.9	582.0	622.9
20°	1512.1	1406.3	1173.2	936.3	758.0	653.0	586.6	553.4	546.5	552.6	591.2
22.5°	1594.7	1483.5	1212.6	930.1	740.2	624.4	558.1	531.0	524.1	527.9	563.5
25°	1621.7	1549.9	1255.0	920.8	722.5	597.4	533.4	514.8	504.8	507.9	538.0
27.5°	1569.2	1559.9	1295.9	904.6	706.2	571.2	513.3	494.8	487.8	490.1	517.1
30°	1431.8	1504.3	1326.0	886.1	681.5	548.8	490.1	473.9	471.6	473.9	492.4
32.5°	1236.5	1393.2	1343.0	859.8	657.6	518.7	470.8	456.9	456.2	454.6	472.4
35°	1043.5	1223.4	1337.6	832.8	636.8	494.8	450.8	440.0	441.5	438.4	453.1
37.5°	856.8	1040.5	1306.7	805.0	604.4	477.0	436.1	423.7	426.8	423.0	435.3
40°	713.2	875.3	1241.1	772.6	574.3	449.2	412.2	408.3	412.2	406.8	414.5
42.5°	612.1	737.1	1148.5	740.2	541.1	427.6	392.9	392.1	397.5	391.3	394.4
45°	527.2	623.7	1039.7	704.7	506.3	402.9	373.6	375.1	382.8	375.1	375.1
47.5°	463.9	535.7	919.3	666.9	471.6	380.5	355.1	358.9	368.9	358.9	355.8
50°	409.1	467.0	804.3	626.7	432.2	359.7	335.8	341.9	354.3	341.2	334.2
52.5°	370.5	411.4	698.5	583.5	397.5	335.0	315.7	324.2	338.8	324.2	312.6
55°	333.4	364.3	602.8	538.0	362.0	311.1	294.1	306.4	323.4	307.2	291.8
57.5°	299.5	325.0	517.9	490.1	325.7	287.1	273.2	287.9	305.7	287.9	270.1
60°	269.4	288.7	444.6	440.7	291.0	261.7	251.6	268.6	288.7	268.6	247.8
62.5°	239.3	254.7	379.8	390.6	257.8	235.4	229.2	247.8	270.1	247.8	226.9
65°	209.9	223.1	322.6	339.6	226.9	209.2	206.9	226.2	251.6	226.2	203.8
67.5°	180.6	190.6	276.3	291.8	193.7	181.4	181.4	204.5	232.3	203.8	177.5
70°	153.6	161.3	229.2	246.2	163.6	155.9	158.2	180.6	209.9	179.1	154.4
72.5°	127.4	133.5	184.5	199.1	135.8	130.4	134.3	158.2	186.0	156.7	132.8
75°	102.7	107.3	146.7	159.8	109.6	106.5	111.1	134.3	160.5	133.5	109.6
77.5°	79.5	83.4	111.1	121.2	83.4	83.4	88.0	113.5	133.5	111.9	87.2
80°	57.1	60.2	80.3	87.2	60.2	61.7	67.2	87.2	105.7	86.4	65.6
82.5°	37.8	40.1	53.3	57.9	40.1	41.7	47.1	66.4	77.2	63.3	46.3
85°	20.8	22.4	30.9	33.2	23.2	25.5	30.1	41.7	50.2	43.2	29.3
87.5°	7.7	8.5	13.1	13.9	10.0	11.6	15.4	22.4	26.2	23.2	15.4
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°	819.7	819.7	819.7	819.7	819.7	819.7
2.5°	798.9	828.2	842.1	868.3	879.9	876.8
5°	778.8	825.1	861.4	913.1	941.7	950.9
7.5°	760.3	820.5	882.2	961.7	1015.0	1029.7
10°	737.9	814.3	901.5	1011.9	1089.1	1115.3
12.5°	720.9	806.6	922.4	1060.5	1167.0	1205.6
15°	697.8	794.2	933.9	1106.1	1247.3	1299.8
17.5°	676.1	781.1	944.7	1147.0	1336.9	1407.9
20°	652.2	770.3	949.4	1186.3	1428.7	1512.1
22.5°	626.7	749.5	947.1	1229.6	1512.8	1594.7
25°	598.2	731.7	936.3	1268.2	1567.6	1621.7
27.5°	571.9	714.0	919.3	1310.6	1573.0	1569.2
30°	546.5	688.5	899.2	1339.9	1512.1	1431.8
32.5°	520.2	663.8	872.2	1354.6	1383.2	1236.5
35°	495.5	638.3	845.2	1343.8	1209.5	1043.5
37.5°	471.6	607.4	815.9	1302.9	1021.2	856.8
40°	447.7	575.8	784.2	1226.5	854.4	713.2
42.5°	426.1	541.1	751.8	1126.9	719.4	612.1
45°	402.1	504.8	714.7	1000.3	613.6	527.2
47.5°	382.1	467.0	676.9	883.8	527.2	463.9
50°	358.1	429.2	635.2	774.2	458.5	409.1
52.5°	332.7	391.3	589.7	675.4	403.7	370.5
55°	308.0	354.3	542.6	582.8	358.9	333.4
57.5°	285.6	319.5	493.2	500.2	319.5	299.5
60°	258.6	284.8	442.3	428.4	282.5	269.4
62.5°	234.6	251.6	390.6	367.4	248.5	239.3
65°	206.1	220.0	338.8	313.4	217.7	209.9
67.5°	178.3	187.6	290.2	261.7	186.0	180.6
70°	155.1	158.2	240.0	216.9	156.7	153.6
72.5°	129.7	133.5	196.8	173.7	129.7	127.4
75°	105.0	106.5	154.4	137.4	105.0	102.7
77.5°	81.8	81.8	115.8	103.4	80.3	79.5
80°	60.2	59.4	82.6	74.1	58.7	57.1
82.5°	40.9	39.4	54.0	48.6	38.6	37.8
85°	24.7	23.2	30.9	28.6	21.6	20.8
87.5°	12.3	11.6	13.1	11.6	7.7	7.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)