

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: P231584

Luminaire Tested: **S125-DR-1-30-X-0048-1-U-DD-3-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231584
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-1-30-X-0048-1-U-DD-3-W
Description: DEFINE 5 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH ASYMMETRIC LENS.
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2999.7 lumens
Efficiency: N/A
Efficacy: 107.5 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

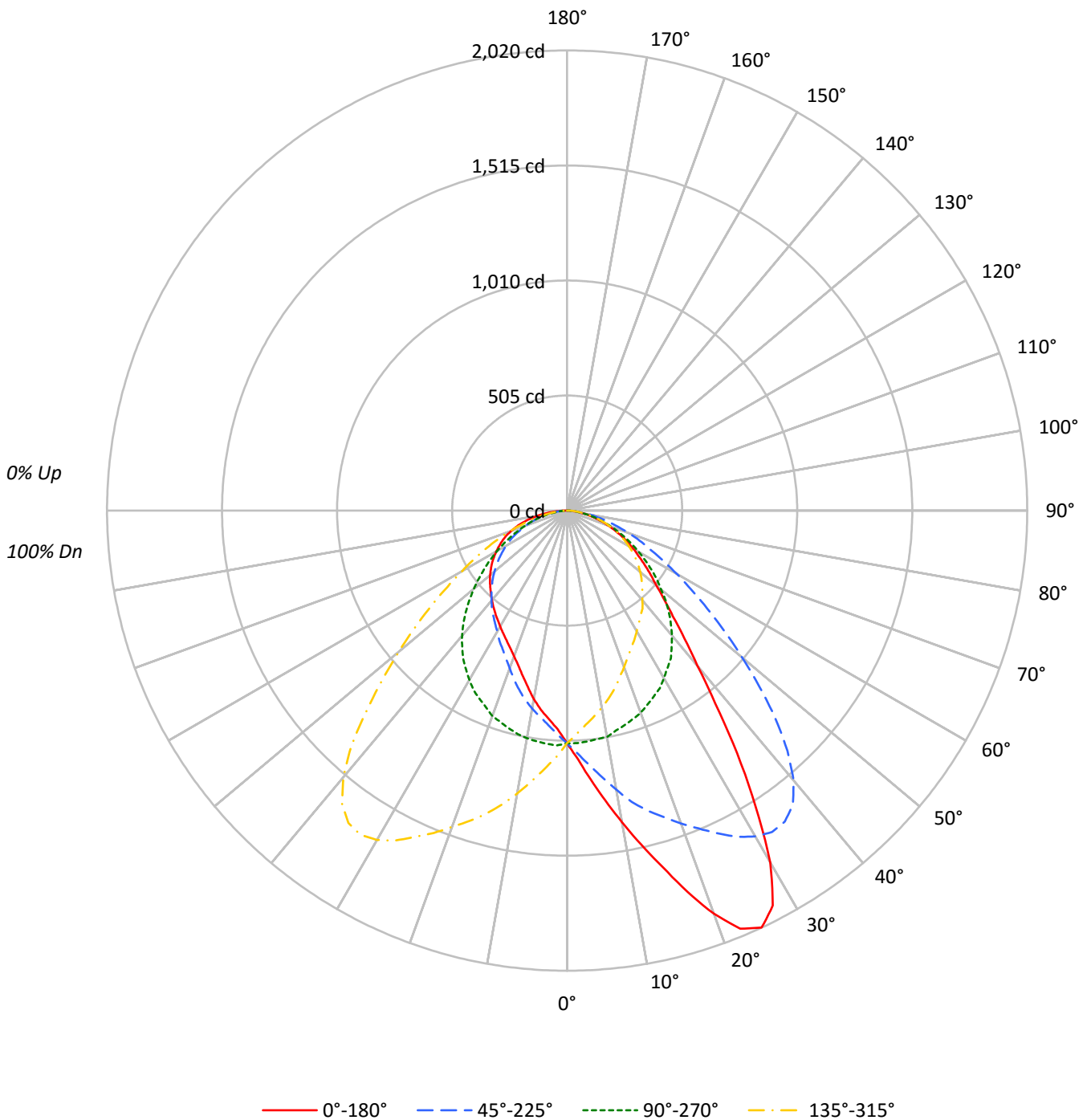
Input Watts (W): 27.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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°	7196	7196	7196	7196
5°	8379	7196	6496	7271
10°	9942	7218	6013	7258
15°	11813	7113	5485	7218
20°	14126	7080	5105	7196
25°	15707	6998	4889	7087
30°	14514	6908	4780	6979
35°	11183	6824	4731	6841
40°	8173	6581	4724	6598
45°	6544	6286	4753	6266
50°	5587	5903	4838	5861
55°	5103	5541	4950	5422
60°	4730	5109	5068	5000
65°	4360	4714	5227	4569
70°	3941	4199	5388	4061
75°	3482	3716	5445	3613
80°	2889	3044	5344	3003
85°	2102	2329	5053	2329



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.6	3.3
10°-20°	308.3	10.3
20°-30°	512.5	17.1
30°-40°	596.8	19.9
40°-50°	537.8	17.9
50°-60°	431.7	14.4
60°-70°	304.2	10.1
70°-80°	164.8	5.5
80°-90°	43.9	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°	920.5	30.7
0°-40°	1517.3	50.6
0°-60°	2486.8	82.9
0°-90°	2999.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2999.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1021	1021	1021	1021	1021	
5°	1185	1017	918	1028	1185	119
15°	1619	975	752	989	1619	469
25°	2020	900	629	912	2020	901
35°	1300	793	550	795	1300	812
45°	657	631	477	629	657	518
55°	415	451	403	441	415	374
65°	262	283	314	274	262	259
75°	128	136	200	133	128	136
85°	26	29	62	29	26	32
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°	1021.2	1021.2	1021.2	1021.2	1021.2	1021.2	1021.2	1021.2	1021.2	1021.2	1021.2
2.5°	1092.3	1082.7	1068.3	1038.5	1022.1	990.4	979.8	970.2	959.6	966.3	982.7
5°	1184.6	1157.7	1121.2	1060.6	1017.3	965.4	943.3	926.0	918.3	923.1	945.2
7.5°	1282.7	1245.2	1180.8	1084.6	1011.5	941.3	910.6	889.4	881.7	886.5	912.5
10°	1389.4	1335.6	1244.2	1110.6	1008.7	923.1	877.9	850.0	840.4	848.1	882.7
12.5°	1501.9	1426.0	1309.6	1126.0	989.4	892.3	844.2	806.7	794.2	805.8	850.0
15°	1619.2	1536.5	1363.5	1143.3	975.0	866.3	807.7	764.4	751.9	764.4	814.4
17.5°	1753.8	1643.3	1410.6	1156.7	959.6	838.5	766.3	724.0	712.5	725.0	776.0
20°	1883.7	1751.9	1461.5	1166.3	944.2	813.5	730.8	689.4	680.8	688.5	736.5
22.5°	1986.5	1848.1	1510.6	1158.7	922.1	777.9	695.2	661.5	652.9	657.7	701.9
25°	2020.2	1930.8	1563.5	1147.1	900.0	744.2	664.4	641.3	628.8	632.7	670.2
27.5°	1954.8	1943.3	1614.4	1126.9	879.8	711.5	639.4	616.3	607.7	610.6	644.2
30°	1783.7	1874.0	1651.9	1103.8	849.0	683.7	610.6	590.4	587.5	590.4	613.5
32.5°	1540.4	1735.6	1673.1	1071.2	819.2	646.2	586.5	569.2	568.3	566.3	588.5
35°	1300.0	1524.0	1666.3	1037.5	793.3	616.3	561.5	548.1	550.0	546.2	564.4
37.5°	1067.3	1296.2	1627.9	1002.9	752.9	594.2	543.3	527.9	531.7	526.9	542.3
40°	888.5	1090.4	1546.2	962.5	715.4	559.6	513.5	508.7	513.5	506.7	516.3
42.5°	762.5	918.3	1430.8	922.1	674.0	532.7	489.4	488.5	495.2	487.5	491.3
45°	656.7	776.9	1295.2	877.9	630.8	501.9	465.4	467.3	476.9	467.3	467.3
47.5°	577.9	667.3	1145.2	830.8	587.5	474.0	442.3	447.1	459.6	447.1	443.3
50°	509.6	581.7	1001.9	780.8	538.5	448.1	418.3	426.0	441.3	425.0	416.3
52.5°	461.5	512.5	870.2	726.9	495.2	417.3	393.3	403.8	422.1	403.8	389.4
55°	415.4	453.8	751.0	670.2	451.0	387.5	366.3	381.7	402.9	382.7	363.5
57.5°	373.1	404.8	645.2	610.6	405.8	357.7	340.4	358.7	380.8	358.7	336.5
60°	335.6	359.6	553.8	549.0	362.5	326.0	313.5	334.6	359.6	334.6	308.7
62.5°	298.1	317.3	473.1	486.5	321.2	293.3	285.6	308.7	336.5	308.7	282.7
65°	261.5	277.9	401.9	423.1	282.7	260.6	257.7	281.7	313.5	281.7	253.8
67.5°	225.0	237.5	344.2	363.5	241.3	226.0	226.0	254.8	289.4	253.8	221.2
70°	191.3	201.0	285.6	306.7	203.8	194.2	197.1	225.0	261.5	223.1	192.3
72.5°	158.7	166.3	229.8	248.1	169.2	162.5	167.3	197.1	231.7	195.2	165.4
75°	127.9	133.7	182.7	199.0	136.5	132.7	138.5	167.3	200.0	166.3	136.5
77.5°	99.0	103.8	138.5	151.0	103.8	103.8	109.6	141.3	166.3	139.4	108.7
80°	71.2	75.0	100.0	108.7	75.0	76.9	83.7	108.7	131.7	107.7	81.7
82.5°	47.1	50.0	66.3	72.1	50.0	51.9	58.7	82.7	96.2	78.8	57.7
85°	26.0	27.9	38.5	41.3	28.8	31.7	37.5	51.9	62.5	53.8	36.5
87.5°	9.6	10.6	16.3	17.3	12.5	14.4	19.2	27.9	32.7	28.8	19.2
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°	1021.2	1021.2	1021.2	1021.2	1021.2	1021.2
2.5°	995.2	1031.7	1049.0	1081.7	1096.2	1092.3
5°	970.2	1027.9	1073.1	1137.5	1173.1	1184.6
7.5°	947.1	1022.1	1099.0	1198.1	1264.4	1282.7
10°	919.2	1014.4	1123.1	1260.6	1356.7	1389.4
12.5°	898.1	1004.8	1149.0	1321.2	1453.8	1501.9
15°	869.2	989.4	1163.5	1377.9	1553.8	1619.2
17.5°	842.3	973.1	1176.9	1428.8	1665.4	1753.8
20°	812.5	959.6	1182.7	1477.9	1779.8	1883.7
22.5°	780.8	933.7	1179.8	1531.7	1884.6	1986.5
25°	745.2	911.5	1166.3	1579.8	1952.9	2020.2
27.5°	712.5	889.4	1145.2	1632.7	1959.6	1954.8
30°	680.8	857.7	1120.2	1669.2	1883.7	1783.7
32.5°	648.1	826.9	1086.5	1687.5	1723.1	1540.4
35°	617.3	795.2	1052.9	1674.0	1506.7	1300.0
37.5°	587.5	756.7	1016.3	1623.1	1272.1	1067.3
40°	557.7	717.3	976.9	1527.9	1064.4	888.5
42.5°	530.8	674.0	936.5	1403.8	896.2	762.5
45°	501.0	628.8	890.4	1246.2	764.4	656.7
47.5°	476.0	581.7	843.3	1101.0	656.7	577.9
50°	446.2	534.6	791.3	964.4	571.2	509.6
52.5°	414.4	487.5	734.6	841.3	502.9	461.5
55°	383.7	441.3	676.0	726.0	447.1	415.4
57.5°	355.8	398.1	614.4	623.1	398.1	373.1
60°	322.1	354.8	551.0	533.7	351.9	335.6
62.5°	292.3	313.5	486.5	457.7	309.6	298.1
65°	256.7	274.0	422.1	390.4	271.2	261.5
67.5°	222.1	233.7	361.5	326.0	231.7	225.0
70°	193.3	197.1	299.0	270.2	195.2	191.3
72.5°	161.5	166.3	245.2	216.3	161.5	158.7
75°	130.8	132.7	192.3	171.2	130.8	127.9
77.5°	101.9	101.9	144.2	128.8	100.0	99.0
80°	75.0	74.0	102.9	92.3	73.1	71.2
82.5°	51.0	49.0	67.3	60.6	48.1	47.1
85°	30.8	28.8	38.5	35.6	26.9	26.0
87.5°	15.4	14.4	16.3	14.4	9.6	9.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)