

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: P231650

Luminaire Tested: **S125-DR-2-40-X-0048-1-U-DD-4-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231650
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33919)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125-DR-2-40-X-0048-1-U-DD-4-W
Description: DEFINE 5 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH DROP LENS.
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

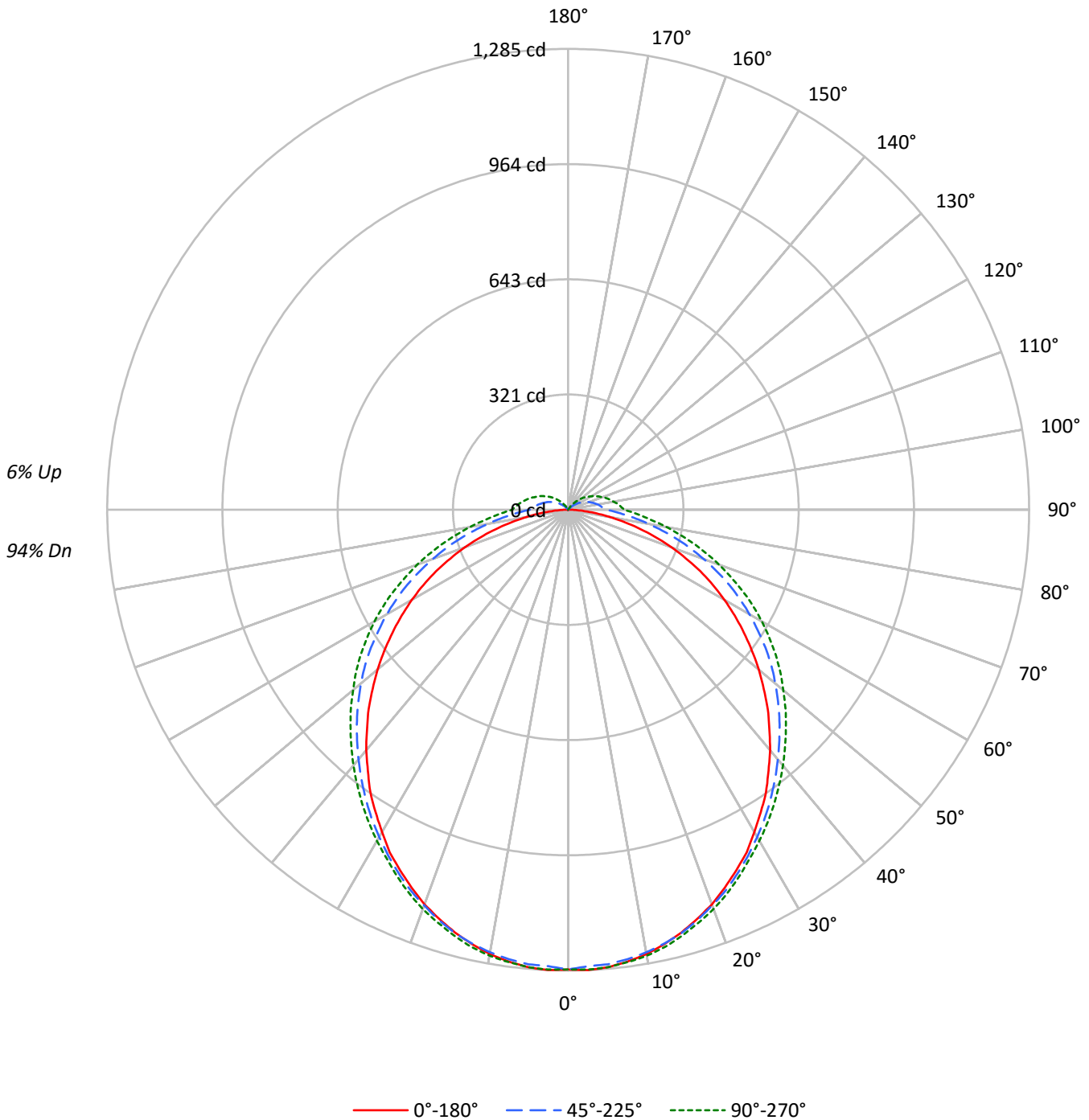
Lumens per Lamp: N/A
Luminaire Lumens: 4040.3 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.92' x H: 0.08')
CIE Type: Direct

Input Watts (W): 42.6
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





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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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79	76
2	96	87	80	74	93	85	78	73	80	75	70	76	72	68	72	69	65	63
3	87	77	68	61	84	74	67	60	71	64	58	67	61	57	64	59	55	52
4	80	68	59	52	77	66	57	51	63	55	50	59	53	48	57	51	47	45
5	73	60	51	44	71	59	50	44	56	48	43	53	47	42	51	45	41	38
6	68	54	45	39	65	53	44	38	51	43	37	48	42	37	46	40	36	34
7	63	49	40	34	61	48	40	34	46	38	33	44	37	32	42	36	32	30
8	58	45	36	30	57	44	36	30	42	35	29	40	34	29	39	33	28	26
9	55	41	33	27	53	40	32	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	24	36	29	24	34	28	24	33	27	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9033	9033	9033
5°	9040	8872	8890
10°	8969	8713	8709
15°	8851	8532	8485
20°	8713	8303	8247
25°	8538	8071	7976
30°	8340	7822	7723
35°	8150	7581	7491
40°	7915	7340	7265
45°	7679	7118	7048
50°	7413	6897	6835
55°	7131	6664	6646
60°	6836	6391	6414
65°	6478	6086	6133
70°	5960	5679	5809
75°	5282	5254	5455
80°	4251	4742	5094
85°	2992	4383	4882



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.4	3.0
10°-20°	345.4	8.5
20°-30°	516.6	12.8
30°-40°	616.1	15.2
40°-50°	640.6	15.9
50°-60°	593.1	14.7
60°-70°	479.3	11.9
70°-80°	318.4	7.9
80°-90°	162.1	4.0
90°-100°	92.2	2.3
100°-110°	69.2	1.7
110°-120°	46.2	1.1
120°-130°	26.2	0.6
130°-140°	11.4	0.3
140°-150°	2.2	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	983.5	24.3
0°-40°	1599.6	39.6
0°-60°	2833.2	70.1
0°-90°	3793.1	93.9
90°-120°	207.5	5.1
90°-150°	247.2	6.1
90°-180°	247.0	6.1
0°-180°	4040.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1282	1282	1282	1282	1282	
5°	1280	1279	1272	1280	1280	121
15°	1220	1223	1222	1231	1230	344
25°	1109	1118	1118	1130	1128	511
35°	962	974	984	998	1001	600
45°	787	811	833	854	858	606
55°	598	633	671	696	706	535
65°	406	447	495	527	536	401
75°	209	259	313	348	360	221
85°	46	100	157	195	208	53
90°	0	51	106	144	156	3
95°	0	41	94	130	143	0
105°	0	25	73	105	116	1
115°	0	11	51	79	89	0
125°	2	2	29	54	62	1
135°	2	0	10	29	35	1
145°	2	2	0	6	11	1
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1281.9	1281.9	1281.9	1281.9	1281.9
2.5°	1285.1	1283.5	1274.0	1283.5	1283.5
5°	1280.3	1278.8	1272.4	1280.3	1280.3
7.5°	1270.8	1270.8	1264.5	1274.0	1272.4
10°	1258.1	1259.7	1253.4	1262.9	1262.9
12.5°	1240.7	1242.3	1239.1	1248.6	1248.6
15°	1220.1	1223.2	1221.6	1231.2	1229.6
17.5°	1196.3	1202.6	1199.4	1209.0	1207.4
20°	1170.9	1177.2	1174.1	1185.2	1185.2
22.5°	1140.7	1148.7	1148.7	1158.2	1158.2
25°	1109.0	1118.5	1118.5	1129.6	1128.0
27.5°	1077.3	1086.8	1086.8	1097.9	1096.3
30°	1037.6	1050.3	1053.5	1066.2	1066.2
32.5°	999.5	1013.8	1020.2	1031.3	1034.4
35°	961.5	974.1	983.7	997.9	1001.1
37.5°	917.0	936.1	947.2	964.6	966.2
40°	875.8	894.8	909.1	928.1	931.3
42.5°	829.8	853.6	871.0	891.6	894.8
45°	786.9	810.7	832.9	853.6	858.3
47.5°	739.3	767.9	793.3	815.5	821.8
50°	693.3	723.5	753.6	777.4	782.2
52.5°	645.7	679.0	713.9	737.7	745.7
55°	598.1	633.0	671.1	696.5	706.0
57.5°	550.5	588.6	626.7	655.2	664.8
60°	502.9	541.0	583.9	612.4	623.5
62.5°	455.3	493.4	539.4	569.6	580.7
65°	406.2	447.4	495.0	526.7	536.3
67.5°	355.4	399.8	447.4	480.7	490.2
70°	306.2	352.2	401.4	436.3	447.4
72.5°	257.0	304.6	357.0	391.9	403.0
75°	209.4	258.6	312.6	347.5	360.1
77.5°	161.8	214.2	268.1	304.6	317.3
80°	117.4	171.3	226.9	263.4	277.6
82.5°	79.3	133.3	190.4	228.5	239.6
85°	46.0	100.0	157.1	195.1	207.8
87.5°	20.6	73.0	130.1	166.6	179.3
90°	0.0	50.8	106.3	144.4	155.5
92.5°	0.0	46.0	100.0	136.4	149.1
95°	0.0	41.3	93.6	130.1	142.8
97.5°	0.0	38.1	88.8	123.8	136.4
100°	0.0	33.3	84.1	117.4	128.5
102.5°	0.0	30.1	77.7	111.1	122.2
105°	0.0	25.4	73.0	104.7	115.8
107.5°	1.6	22.2	66.6	98.4	109.5
110°	1.6	19.0	61.9	92.0	101.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	14.3	55.5	85.7	95.2
115°	0.0	11.1	50.8	79.3	88.8
117.5°	0.0	7.9	44.4	73.0	82.5
120°	1.6	4.8	39.7	66.6	74.6
122.5°	1.6	1.6	34.9	58.7	68.2
125°	1.6	1.6	28.6	53.9	61.9
127.5°	0.0	1.6	23.8	47.6	55.5
130°	1.6	0.0	19.0	41.3	49.2
132.5°	1.6	1.6	14.3	34.9	42.8
135°	1.6	0.0	9.5	28.6	34.9
137.5°	1.6	0.0	6.3	22.2	28.6
140°	1.6	1.6	1.6	17.5	22.2
142.5°	1.6	1.6	0.0	11.1	15.9
145°	1.6	1.6	0.0	6.3	11.1
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)