

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: P231648

Luminaire Tested: **S125-DR-2-30-X-0048-1-U-DD-4-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231648
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-2-30-X-0048-1-U-DD-4-W
Description: DEFINE 5 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH DROP LENS.
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3811.6 lumens
Efficiency: N/A
Efficacy: 89.5 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

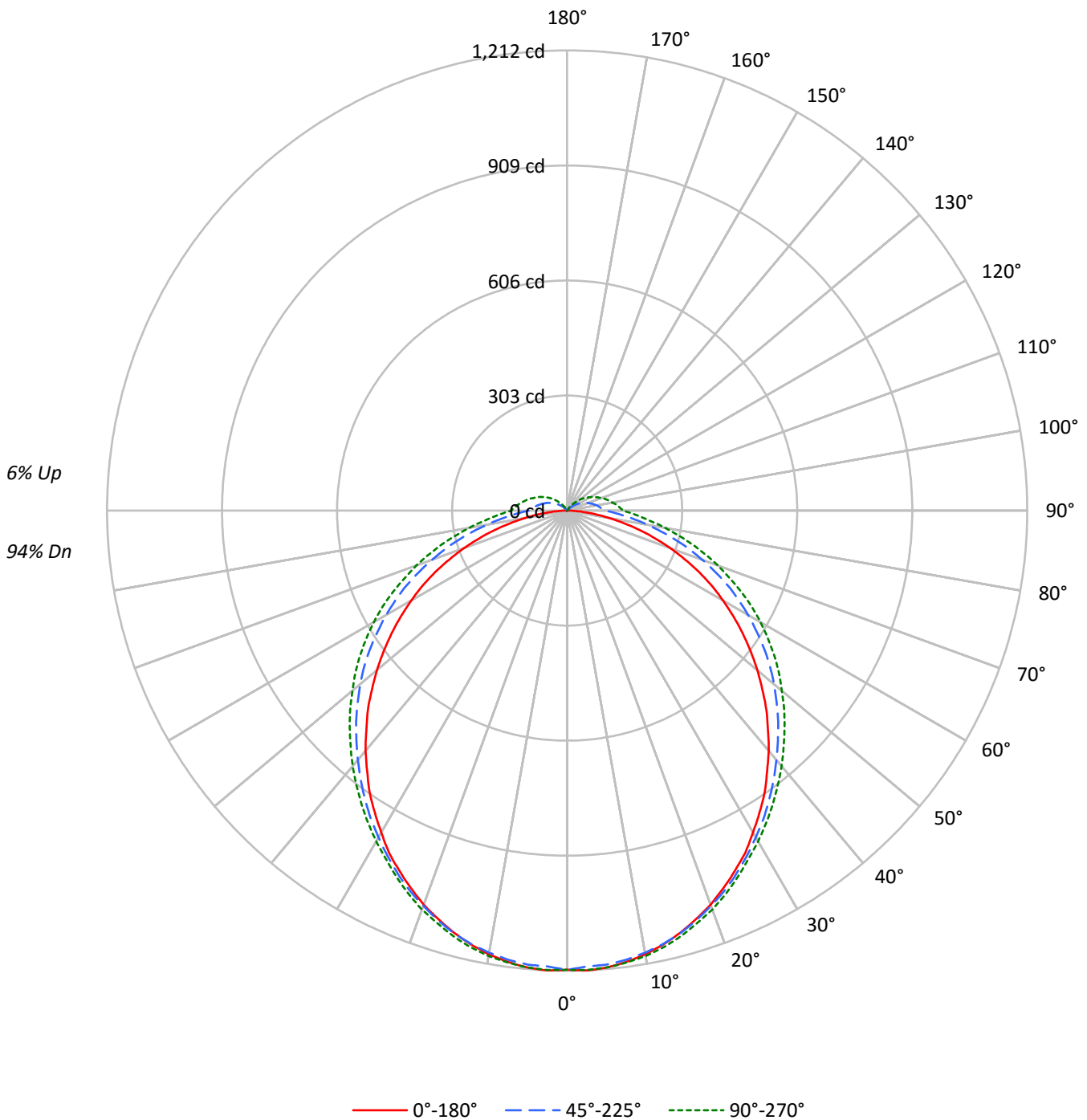
Input Watts (W): 42.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8522	8522	8522
5°	8528	8370	8387
10°	8461	8220	8216
15°	8349	8050	8004
20°	8220	7832	7780
25°	8054	7615	7525
30°	7869	7379	7286
35°	7688	7151	7067
40°	7467	6924	6854
45°	7244	6716	6649
50°	6993	6507	6448
55°	6728	6287	6271
60°	6450	6029	6051
65°	6111	5742	5785
70°	5624	5358	5480
75°	4984	4957	5148
80°	4012	4472	4806
85°	2823	4134	4607



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.5	3.0
10°-20°	325.9	8.5
20°-30°	487.4	12.8
30°-40°	581.2	15.2
40°-50°	604.3	15.9
50°-60°	559.5	14.7
60°-70°	452.2	11.9
70°-80°	300.4	7.9
80°-90°	152.9	4.0
90°-100°	86.9	2.3
100°-110°	65.3	1.7
110°-120°	43.5	1.1
120°-130°	24.7	0.6
130°-140°	10.7	0.3
140°-150°	2.0	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	927.8	24.3
0°-40°	1509.0	39.6
0°-60°	2672.9	70.1
0°-90°	3578.4	93.9
90°-120°	195.8	5.1
90°-150°	233.2	6.1
90°-180°	233.0	6.1
0°-180°	3811.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1209	1209	1209	1209	1209	
5°	1208	1206	1200	1208	1208	115
15°	1151	1154	1152	1162	1160	324
25°	1046	1055	1055	1066	1064	482
35°	907	919	928	942	944	566
45°	742	765	786	805	810	572
55°	564	597	633	657	666	505
65°	383	422	467	497	506	378
75°	198	244	295	328	340	209
85°	43	94	148	184	196	50
90°	0	48	100	136	147	3
95°	0	39	88	123	135	0
105°	0	24	69	99	109	1
115°	0	10	48	75	84	0
125°	2	2	27	51	58	1
135°	2	0	9	27	33	1
145°	2	2	0	6	10	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°	1209.4	1209.4	1209.4	1209.4	1209.4
2.5°	1212.4	1210.9	1201.9	1210.9	1210.9
5°	1207.9	1206.4	1200.4	1207.9	1207.9
7.5°	1198.9	1198.9	1192.9	1201.9	1200.4
10°	1186.9	1188.4	1182.4	1191.4	1191.4
12.5°	1170.5	1172.0	1169.0	1177.9	1177.9
15°	1151.0	1154.0	1152.5	1161.5	1160.0
17.5°	1128.5	1134.5	1131.5	1140.5	1139.0
20°	1104.6	1110.6	1107.6	1118.1	1118.1
22.5°	1076.2	1083.6	1083.6	1092.6	1092.6
25°	1046.2	1055.2	1055.2	1065.7	1064.2
27.5°	1016.3	1025.3	1025.3	1035.8	1034.3
30°	978.9	990.8	993.8	1005.8	1005.8
32.5°	943.0	956.4	962.4	972.9	975.9
35°	907.0	919.0	928.0	941.5	944.4
37.5°	865.1	883.1	893.6	910.0	911.5
40°	826.2	844.2	857.6	875.6	878.6
42.5°	782.8	805.3	821.7	841.2	844.2
45°	742.4	764.8	785.8	805.3	809.7
47.5°	697.5	724.4	748.4	769.3	775.3
50°	654.1	682.5	711.0	733.4	737.9
52.5°	609.2	640.6	673.5	696.0	703.5
55°	564.3	597.2	633.1	657.1	666.1
57.5°	519.4	555.3	591.2	618.2	627.1
60°	474.5	510.4	550.8	577.7	588.2
62.5°	429.6	465.5	508.9	537.3	547.8
65°	383.2	422.1	467.0	496.9	505.9
67.5°	335.3	377.2	422.1	453.5	462.5
70°	288.9	332.3	378.7	411.6	422.1
72.5°	242.5	287.4	336.8	369.7	380.2
75°	197.6	244.0	294.9	327.8	339.8
77.5°	152.7	202.1	253.0	287.4	299.3
80°	110.8	161.6	214.0	248.5	261.9
82.5°	74.8	125.7	179.6	215.5	226.0
85°	43.4	94.3	148.2	184.1	196.1
87.5°	19.5	68.9	122.7	157.2	169.1
90°	0.0	47.9	100.3	136.2	146.7
92.5°	0.0	43.4	94.3	128.7	140.7
95°	0.0	38.9	88.3	122.7	134.7
97.5°	0.0	35.9	83.8	116.7	128.7
100°	0.0	31.4	79.3	110.8	121.2
102.5°	0.0	28.4	73.3	104.8	115.2
105°	0.0	23.9	68.9	98.8	109.3
107.5°	1.5	21.0	62.9	92.8	103.3
110°	1.5	18.0	58.4	86.8	95.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	13.5	52.4	80.8	89.8
115°	0.0	10.5	47.9	74.8	83.8
117.5°	0.0	7.5	41.9	68.9	77.8
120°	1.5	4.5	37.4	62.9	70.3
122.5°	1.5	1.5	32.9	55.4	64.4
125°	1.5	1.5	26.9	50.9	58.4
127.5°	0.0	1.5	22.5	44.9	52.4
130°	1.5	0.0	18.0	38.9	46.4
132.5°	1.5	1.5	13.5	32.9	40.4
135°	1.5	0.0	9.0	26.9	32.9
137.5°	1.5	0.0	6.0	21.0	26.9
140°	1.5	1.5	1.5	16.5	21.0
142.5°	1.5	1.5	0.0	10.5	15.0
145°	1.5	1.5	0.0	6.0	10.5
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)