

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: P242847

Luminaire Tested: **S125DR-S1090D835-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242847
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DR-S1090D835-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4029.5 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

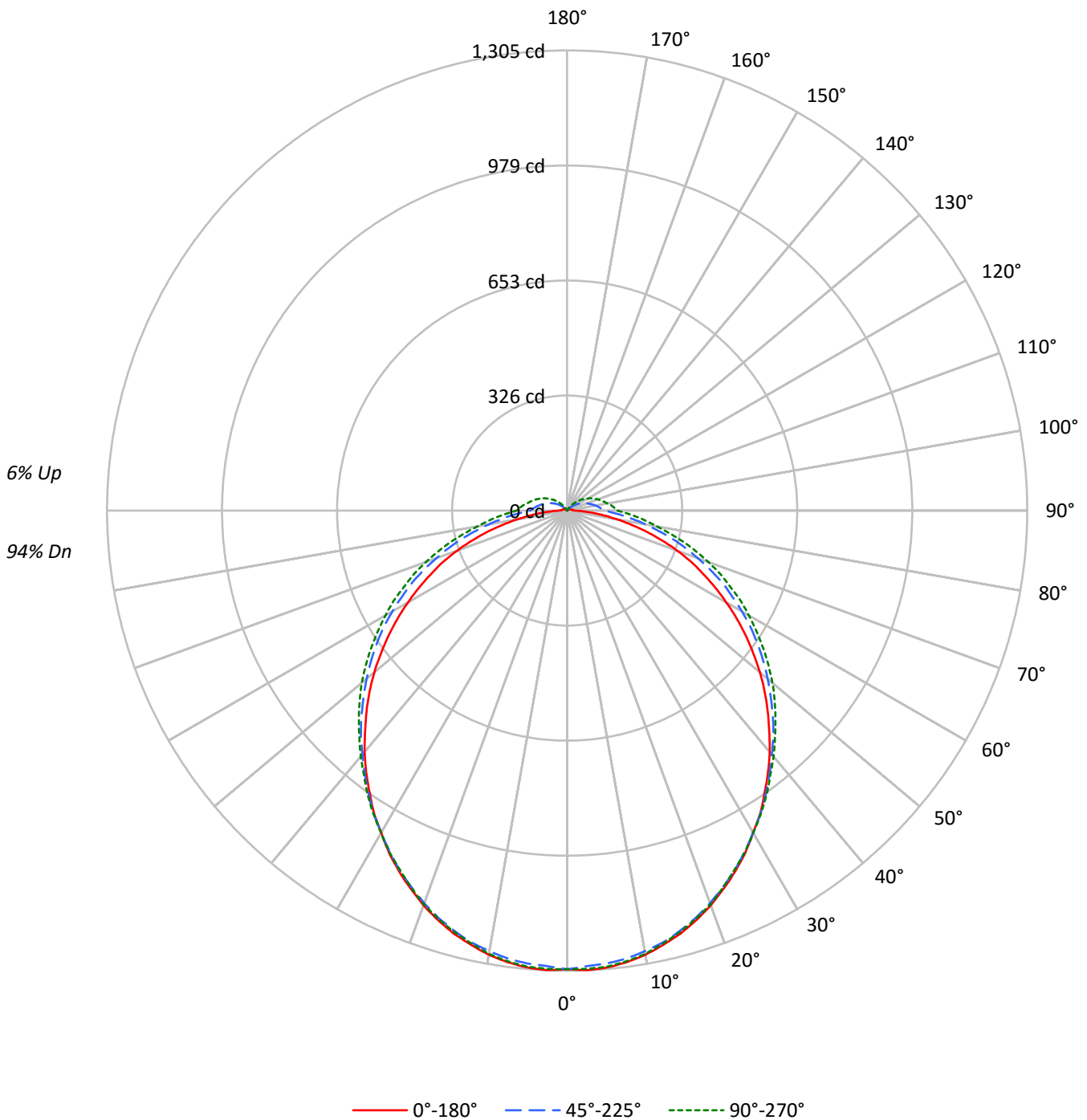
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65	63
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	53
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	45
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	27
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9245	9245	9245
5°	9263	9067	9092
10°	9196	8897	8879
15°	9087	8696	8610
20°	8939	8450	8342
25°	8763	8187	8014
30°	8549	7898	7716
35°	8349	7632	7442
40°	8147	7353	7166
45°	7918	7113	6920
50°	7699	6851	6701
55°	7436	6604	6444
60°	7148	6322	6182
65°	6847	6027	5887
70°	6506	5625	5581
75°	5964	5233	5207
80°	5257	4759	4797
85°	4589	4417	4629



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.1	3.1
10°-20°	349.4	8.7
20°-30°	519.6	12.9
30°-40°	615.4	15.3
40°-50°	636.2	15.8
50°-60°	586.0	14.5
60°-70°	473.8	11.8
70°-80°	317.0	7.9
80°-90°	163.8	4.1
90°-100°	92.3	2.3
100°-110°	68.0	1.7
110°-120°	45.5	1.1
120°-130°	25.8	0.6
130°-140°	11.3	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°	992.1	24.6
0°-40°	1607.5	39.9
0°-60°	2829.7	70.2
0°-90°	3784.3	93.9
90°-120°	205.9	5.1
90°-150°	245.2	6.1
90°-180°	245.0	6.1
0°-180°	4029.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1301	1301	1301	1301	1301	
5°	1301	1298	1289	1300	1298	123
15°	1242	1243	1234	1242	1237	350
25°	1129	1132	1125	1130	1124	520
35°	977	986	982	986	986	611
45°	805	819	825	834	835	621
55°	618	639	659	673	678	553
65°	426	455	486	505	510	423
75°	235	268	309	334	340	249
85°	70	112	157	185	195	73
90°	20	61	105	134	143	14
95°	17	50	93	121	130	13
105°	12	32	70	96	105	12
115°	8	17	50	73	80	8
125°	5	4	29	50	56	4
135°	3	1	10	27	33	2
145°	1	0	0	6	12	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°	1300.8	1300.8	1300.8	1300.8	1300.8
2.5°	1304.6	1302.0	1293.1	1302.0	1300.8
5°	1300.8	1298.2	1289.3	1299.5	1298.2
7.5°	1291.8	1290.5	1281.6	1290.5	1289.3
10°	1279.1	1279.1	1268.9	1277.8	1276.5
12.5°	1261.2	1262.5	1254.8	1261.2	1257.4
15°	1242.1	1243.4	1234.4	1242.1	1237.0
17.5°	1217.9	1220.4	1211.5	1217.9	1214.0
20°	1191.1	1193.6	1184.7	1188.5	1188.5
22.5°	1160.5	1165.6	1155.4	1160.5	1156.6
25°	1128.6	1132.4	1124.8	1129.9	1123.5
27.5°	1094.2	1099.3	1090.3	1094.2	1091.6
30°	1054.6	1062.3	1054.6	1057.2	1055.9
32.5°	1018.9	1025.3	1020.2	1022.7	1021.5
35°	976.8	985.8	981.9	985.8	985.8
37.5°	936.0	943.7	942.4	947.5	946.2
40°	893.9	904.1	902.9	908.0	910.5
42.5°	848.0	862.1	865.9	872.3	872.3
45°	804.7	818.7	825.1	834.0	835.3
47.5°	760.0	772.8	783.0	795.8	798.3
50°	714.1	728.2	742.2	756.2	760.0
52.5°	665.7	683.5	701.4	716.7	719.2
55°	618.5	638.9	659.3	673.3	678.4
57.5°	570.0	594.3	617.2	632.5	636.3
60°	521.6	547.1	572.6	591.7	595.5
62.5°	474.4	499.9	528.0	549.6	554.7
65°	425.9	455.3	485.9	505.0	510.1
67.5°	381.3	409.4	440.0	462.9	469.3
70°	331.6	360.9	394.1	418.3	425.9
72.5°	283.1	313.7	350.7	377.5	382.6
75°	234.6	267.8	308.6	334.1	340.5
77.5°	187.5	225.7	264.0	292.0	297.1
80°	144.1	182.4	225.7	253.8	258.9
82.5°	104.6	145.4	190.0	216.8	227.0
85°	70.1	112.2	156.9	184.9	195.1
87.5°	44.6	85.4	128.8	158.1	167.1
90°	20.4	61.2	104.6	133.9	142.8
92.5°	17.9	54.8	99.5	127.5	136.5
95°	16.6	49.7	93.1	121.1	130.1
97.5°	15.3	45.9	88.0	114.8	123.7
100°	14.0	40.8	81.6	108.4	116.0
102.5°	12.8	37.0	76.5	102.0	109.7
105°	11.5	31.9	70.1	95.6	104.6
107.5°	10.2	28.1	65.0	90.5	98.2
110°	8.9	24.2	59.9	84.2	93.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	8.9	20.4	54.8	77.8	86.7
115°	7.7	16.6	49.7	72.7	80.3
117.5°	6.4	12.8	44.6	66.3	75.2
120°	6.4	10.2	39.5	61.2	68.9
122.5°	5.1	6.4	34.4	54.8	62.5
125°	5.1	3.8	29.3	49.7	56.1
127.5°	3.8	2.6	24.2	43.4	51.0
130°	3.8	2.6	20.4	38.3	44.6
132.5°	2.6	2.6	15.3	33.2	38.3
135°	2.6	1.3	10.2	26.8	33.2
137.5°	2.6	1.3	6.4	21.7	26.8
140°	1.3	1.3	2.6	16.6	21.7
142.5°	1.3	0.0	0.0	11.5	16.6
145°	1.3	0.0	0.0	6.4	11.5
147.5°	0.0	0.0	0.0	2.6	5.1
150°	0.0	0.0	0.0	0.0	1.3
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)