

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: P243707

Luminaire Tested: **S125DR-H1090D835-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243707
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-56)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DR-H1090D835-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4045.3 lumens
Efficiency: N/A
Efficacy: 128.4 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

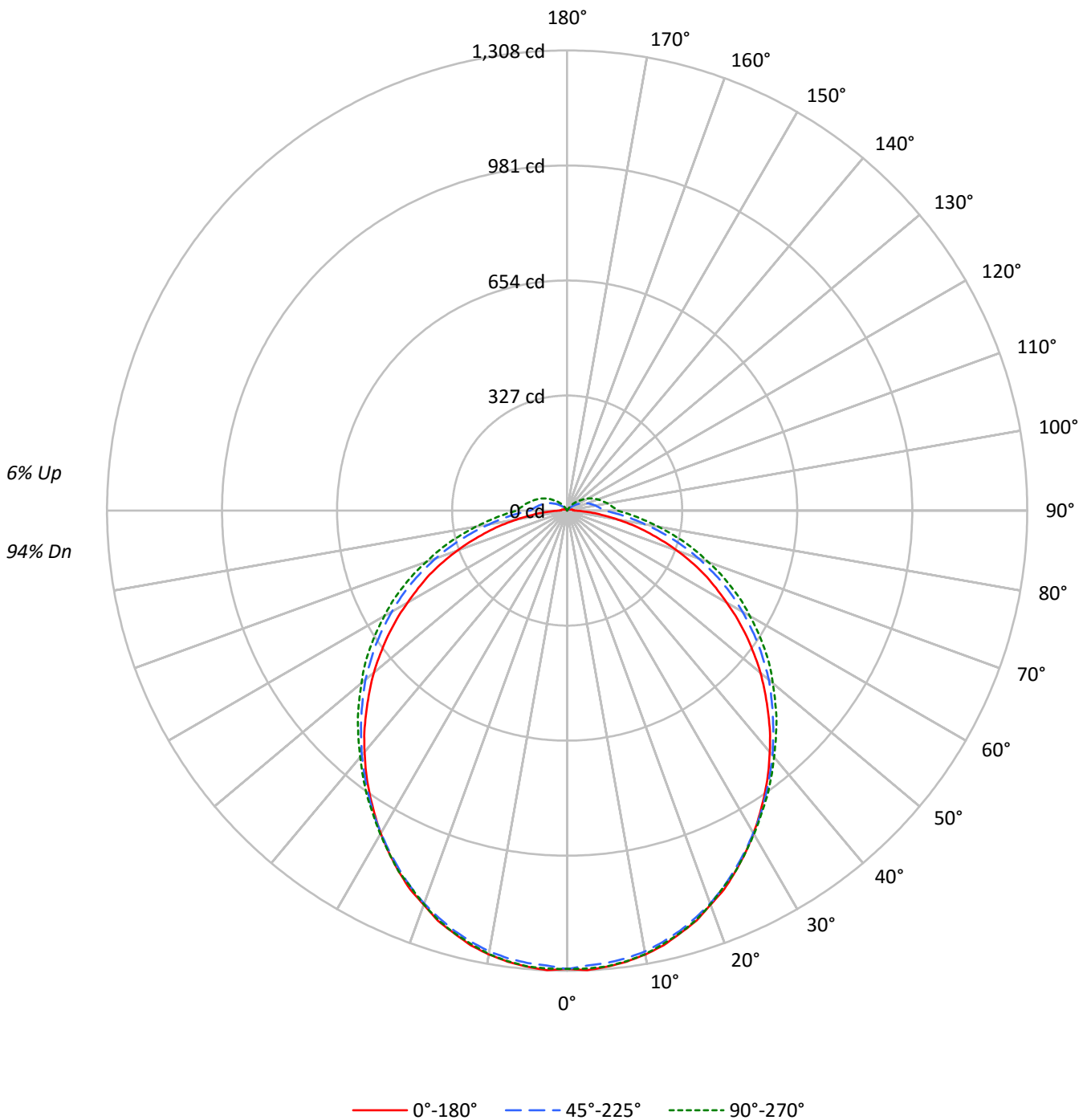
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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	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°	9259	9259	9259
5°	9269	9077	9108
10°	9211	8924	8903
15°	9100	8712	8649
20°	8946	8476	8359
25°	8788	8203	8074
30°	8589	7927	7760
35°	8378	7657	7481
40°	8165	7394	7202
45°	7938	7131	6973
50°	7736	6914	6731
55°	7484	6646	6508
60°	7178	6355	6224
65°	6930	6049	5948
70°	6520	5672	5586
75°	5969	5226	5267
80°	5315	4748	4863
85°	4726	4439	4629



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.3	3.0
10°-20°	350.3	8.7
20°-30°	521.4	12.9
30°-40°	617.7	15.3
40°-50°	639.1	15.8
50°-60°	589.5	14.6
60°-70°	476.4	11.8
70°-80°	318.3	7.9
80°-90°	164.2	4.1
90°-100°	92.1	2.3
100°-110°	68.3	1.7
110°-120°	45.5	1.1
120°-130°	25.4	0.6
130°-140°	11.4	0.3
140°-150°	2.4	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	994.9	24.6
0°-40°	1612.6	39.9
0°-60°	2841.2	70.2
0°-90°	3800.1	93.9
90°-120°	205.9	5.1
90°-150°	245.2	6.1
90°-180°	245.0	6.1
0°-180°	4045.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1303	1303	1303	1303	1303	
5°	1302	1300	1291	1300	1300	124
15°	1244	1247	1237	1244	1243	351
25°	1132	1137	1127	1133	1132	521
35°	980	987	985	990	991	613
45°	807	820	827	840	842	623
55°	622	642	664	679	685	556
65°	431	456	488	509	515	425
75°	235	270	308	335	344	249
85°	72	113	158	185	195	74
90°	20	60	105	134	143	14
95°	17	51	93	120	129	13
105°	12	32	71	96	105	13
115°	8	17	49	72	81	8
125°	5	5	29	47	55	5
135°	2	2	11	28	32	2
145°	1	0	0	7	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°	1302.8	1302.8	1302.8	1302.8	1302.8
2.5°	1307.7	1304.0	1294.4	1304.0	1302.8
5°	1301.6	1300.4	1290.8	1300.4	1300.4
7.5°	1293.2	1292.0	1283.6	1293.2	1292.0
10°	1281.2	1281.2	1272.7	1280.0	1280.0
12.5°	1265.5	1265.5	1255.9	1264.3	1261.9
15°	1243.8	1247.4	1236.6	1243.8	1242.6
17.5°	1222.2	1222.2	1213.7	1219.8	1219.8
20°	1192.1	1196.9	1188.4	1194.5	1190.9
22.5°	1165.6	1168.0	1159.5	1165.6	1159.5
25°	1131.9	1136.7	1127.0	1133.1	1131.9
27.5°	1096.9	1100.5	1093.3	1100.5	1096.9
30°	1059.6	1063.2	1058.4	1063.2	1062.0
32.5°	1019.9	1027.1	1023.5	1027.1	1025.9
35°	980.1	987.4	985.0	989.8	991.0
37.5°	939.2	946.4	946.4	952.4	953.6
40°	895.9	905.5	907.9	916.3	915.1
42.5°	853.7	863.3	867.0	877.8	877.8
45°	806.7	820.0	827.2	840.5	841.7
47.5°	762.2	776.6	787.5	799.5	801.9
50°	717.6	730.9	749.0	761.0	763.4
52.5°	669.5	686.3	704.4	721.3	726.1
55°	622.5	641.8	663.5	679.1	685.1
57.5°	574.4	594.8	618.9	638.2	643.0
60°	523.8	547.9	575.6	594.8	599.6
62.5°	476.8	503.3	532.2	552.7	559.9
65°	431.1	456.4	487.7	509.3	515.4
67.5°	381.7	409.4	441.9	466.0	472.0
70°	332.3	362.4	397.4	420.2	426.3
72.5°	281.8	315.5	352.8	378.1	385.3
75°	234.8	269.7	308.2	334.7	344.4
77.5°	190.2	226.4	264.9	292.6	301.0
80°	145.7	183.0	225.2	254.1	262.5
82.5°	106.0	145.7	189.0	217.9	226.4
85°	72.2	113.2	157.7	185.4	195.1
87.5°	44.6	84.3	130.0	157.7	167.4
90°	20.5	60.2	104.8	133.7	143.3
92.5°	18.1	55.4	98.7	127.6	136.1
95°	16.9	50.6	92.7	120.4	128.8
97.5°	15.7	45.8	86.7	114.4	122.8
100°	14.4	40.9	81.9	108.4	116.8
102.5°	13.2	37.3	75.9	102.3	109.6
105°	12.0	32.5	71.0	96.3	104.8
107.5°	10.8	27.7	66.2	90.3	98.7
110°	9.6	24.1	60.2	84.3	92.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	8.4	20.5	55.4	78.3	86.7
115°	8.4	16.9	49.4	72.2	80.7
117.5°	7.2	13.2	43.3	66.2	74.7
120°	6.0	9.6	38.5	60.2	68.6
122.5°	6.0	7.2	33.7	54.2	62.6
125°	4.8	4.8	28.9	47.0	55.4
127.5°	4.8	3.6	24.1	42.1	48.2
130°	3.6	2.4	20.5	37.3	43.3
132.5°	3.6	2.4	15.7	32.5	38.5
135°	2.4	2.4	10.8	27.7	32.5
137.5°	2.4	1.2	7.2	21.7	27.7
140°	1.2	1.2	2.4	16.9	21.7
142.5°	1.2	1.2	1.2	12.0	16.9
145°	1.2	0.0	0.0	7.2	10.8
147.5°	1.2	0.0	0.0	2.4	6.0
150°	0.0	0.0	0.0	0.0	1.2
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)