

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: P243728

Luminaire Tested: **S125DR-H1270D940-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243728
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-H1270D940-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4213.9 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

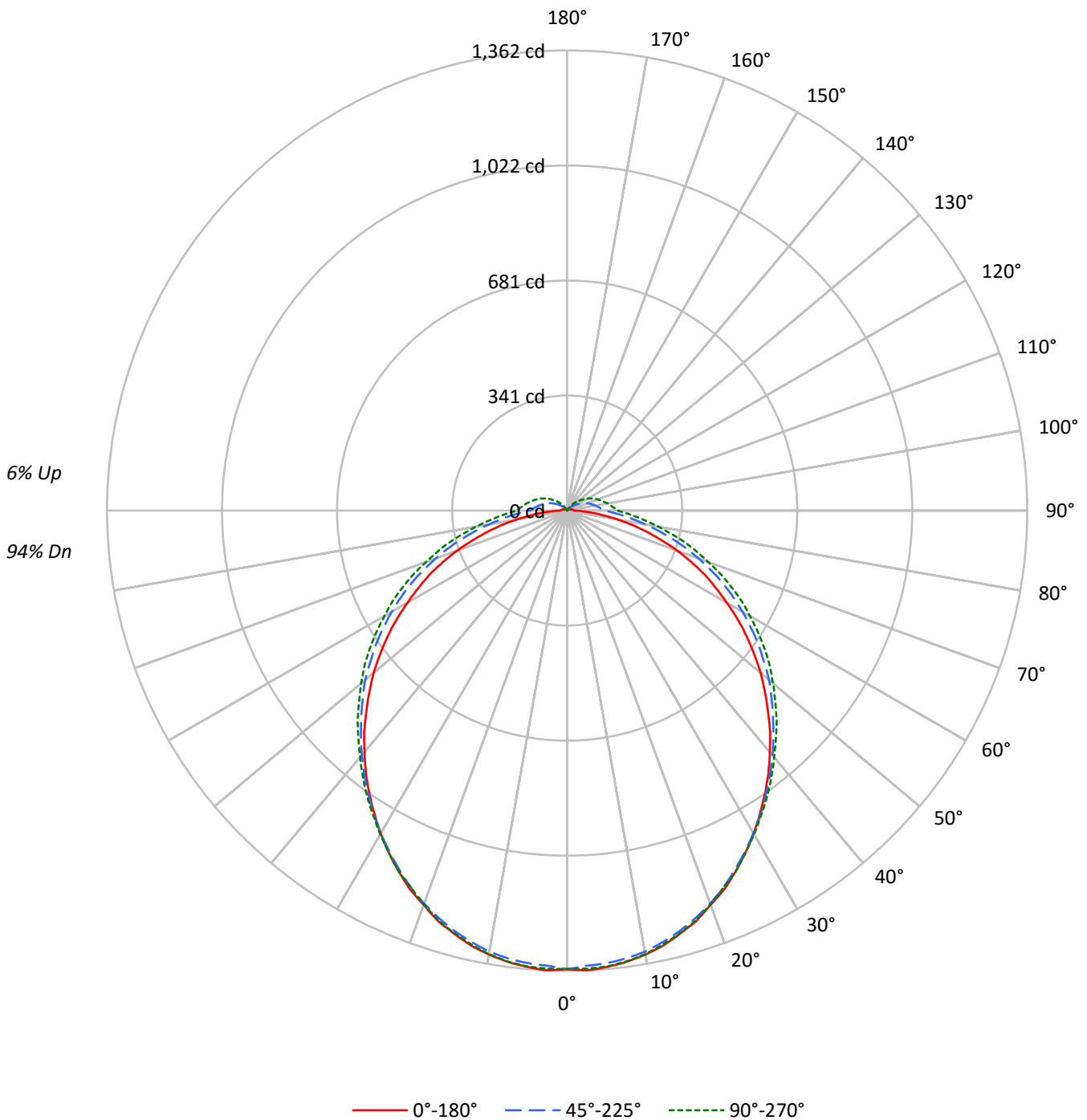
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	9645	9645	9645
5°	9655	9456	9487
10°	9595	9296	9274
15°	9479	9075	9010
20°	9319	8830	8707
25°	9154	8545	8410
30°	8948	8257	8084
35°	8727	7975	7793
40°	8505	7702	7502
45°	8269	7428	7264
50°	8060	7202	7011
55°	7796	6923	6779
60°	7477	6620	6484
65°	7218	6301	6195
70°	6793	5907	5818
75°	6218	5445	5485
80°	5538	4946	5065
85°	4929	4625	4821



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.4	3.0
10°-20°	364.9	8.7
20°-30°	543.1	12.9
30°-40°	643.4	15.3
40°-50°	665.8	15.8
50°-60°	614.0	14.6
60°-70°	496.2	11.8
70°-80°	331.6	7.9
80°-90°	171.1	4.1
90°-100°	95.9	2.3
100°-110°	71.2	1.7
110°-120°	47.4	1.1
120°-130°	26.5	0.6
130°-140°	11.9	0.3
140°-150°	2.5	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1036.4	24.6
0°-40°	1679.8	39.9
0°-60°	2959.6	70.2
0°-90°	3958.5	93.9
90°-120°	214.5	5.1
90°-150°	255.4	6.1
90°-180°	255.0	6.1
0°-180°	4213.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1357	1357	1357	1357	1357	
5°	1356	1355	1345	1355	1355	129
15°	1296	1300	1288	1296	1294	365
25°	1179	1184	1174	1180	1179	543
35°	1021	1028	1026	1031	1032	639
45°	840	854	862	876	877	649
55°	648	668	691	707	714	579
65°	449	475	508	531	537	443
75°	245	281	321	349	359	260
85°	75	118	164	193	203	77
90°	21	63	109	139	149	15
95°	18	53	97	125	134	14
105°	12	34	74	100	109	13
115°	9	18	51	75	84	8
125°	5	5	30	49	58	5
135°	2	2	11	29	34	2
145°	1	0	0	8	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



TEST NUMBER: P243728

CATALOG NUMBER: S125DR-H1270D940-X4F0-XX-UDD-D-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1357.1	1357.1	1357.1	1357.1	1357.1
2.5°	1362.2	1358.4	1348.4	1358.4	1357.1
5°	1355.9	1354.6	1344.6	1354.6	1354.6
7.5°	1347.1	1345.9	1337.1	1347.1	1345.9
10°	1334.6	1334.6	1325.8	1333.3	1333.3
12.5°	1318.3	1318.3	1308.2	1317.0	1314.5
15°	1295.7	1299.5	1288.2	1295.7	1294.4
17.5°	1273.1	1273.1	1264.3	1270.6	1270.6
20°	1241.8	1246.8	1238.0	1244.3	1240.5
22.5°	1214.2	1216.7	1207.9	1214.2	1207.9
25°	1179.0	1184.1	1174.0	1180.3	1179.0
27.5°	1142.7	1146.4	1138.9	1146.4	1142.7
30°	1103.8	1107.5	1102.5	1107.5	1106.3
32.5°	1062.4	1069.9	1066.2	1069.9	1068.7
35°	1021.0	1028.5	1026.0	1031.0	1032.3
37.5°	978.4	985.9	985.9	992.1	993.4
40°	933.2	943.2	945.7	954.5	953.3
42.5°	889.3	899.3	903.1	914.4	914.4
45°	840.4	854.2	861.7	875.5	876.8
47.5°	794.0	809.0	820.3	832.9	835.4
50°	747.6	761.4	780.2	792.7	795.2
52.5°	697.4	714.9	733.8	751.3	756.3
55°	648.5	668.5	691.1	707.4	713.7
57.5°	598.3	619.6	644.7	664.8	669.8
60°	545.6	570.7	599.6	619.6	624.6
62.5°	496.7	524.3	554.4	575.7	583.2
65°	449.0	475.4	508.0	530.6	536.8
67.5°	397.6	426.5	460.3	485.4	491.7
70°	346.2	377.5	413.9	437.7	444.0
72.5°	293.5	328.6	367.5	393.8	401.4
75°	244.6	281.0	321.1	348.7	358.7
77.5°	198.2	235.8	275.9	304.8	313.6
80°	151.8	190.7	234.6	264.7	273.4
82.5°	110.4	151.8	196.9	227.0	235.8
85°	75.3	117.9	164.3	193.2	203.2
87.5°	46.4	87.8	135.5	164.3	174.3
90°	21.3	62.7	109.1	139.2	149.3
92.5°	18.8	57.7	102.9	133.0	141.7
95°	17.6	52.7	96.6	125.4	134.2
97.5°	16.3	47.7	90.3	119.2	127.9
100°	15.1	42.6	85.3	112.9	121.7
102.5°	13.8	38.9	79.0	106.6	114.1
105°	12.5	33.9	74.0	100.3	109.1
107.5°	11.3	28.8	69.0	94.1	102.9
110°	10.0	25.1	62.7	87.8	96.6



TEST NUMBER: P243728

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	8.8	21.3	57.7	81.5	90.3
115°	8.8	17.6	51.4	75.3	84.0
117.5°	7.5	13.8	45.2	69.0	77.8
120°	6.3	10.0	40.1	62.7	71.5
122.5°	6.3	7.5	35.1	56.4	65.2
125°	5.0	5.0	30.1	48.9	57.7
127.5°	5.0	3.8	25.1	43.9	50.2
130°	3.8	2.5	21.3	38.9	45.2
132.5°	3.8	2.5	16.3	33.9	40.1
135°	2.5	2.5	11.3	28.8	33.9
137.5°	2.5	1.3	7.5	22.6	28.8
140°	1.3	1.3	2.5	17.6	22.6
142.5°	1.3	1.3	1.3	12.5	17.6
145°	1.3	0.0	0.0	7.5	11.3
147.5°	1.3	0.0	0.0	2.5	6.3
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)