

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: P242839

Luminaire Tested: **S125DR-S1270D927-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242839
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-S1270D927-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3709.8 lumens
Efficiency: N/A
Efficacy: 90.3 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

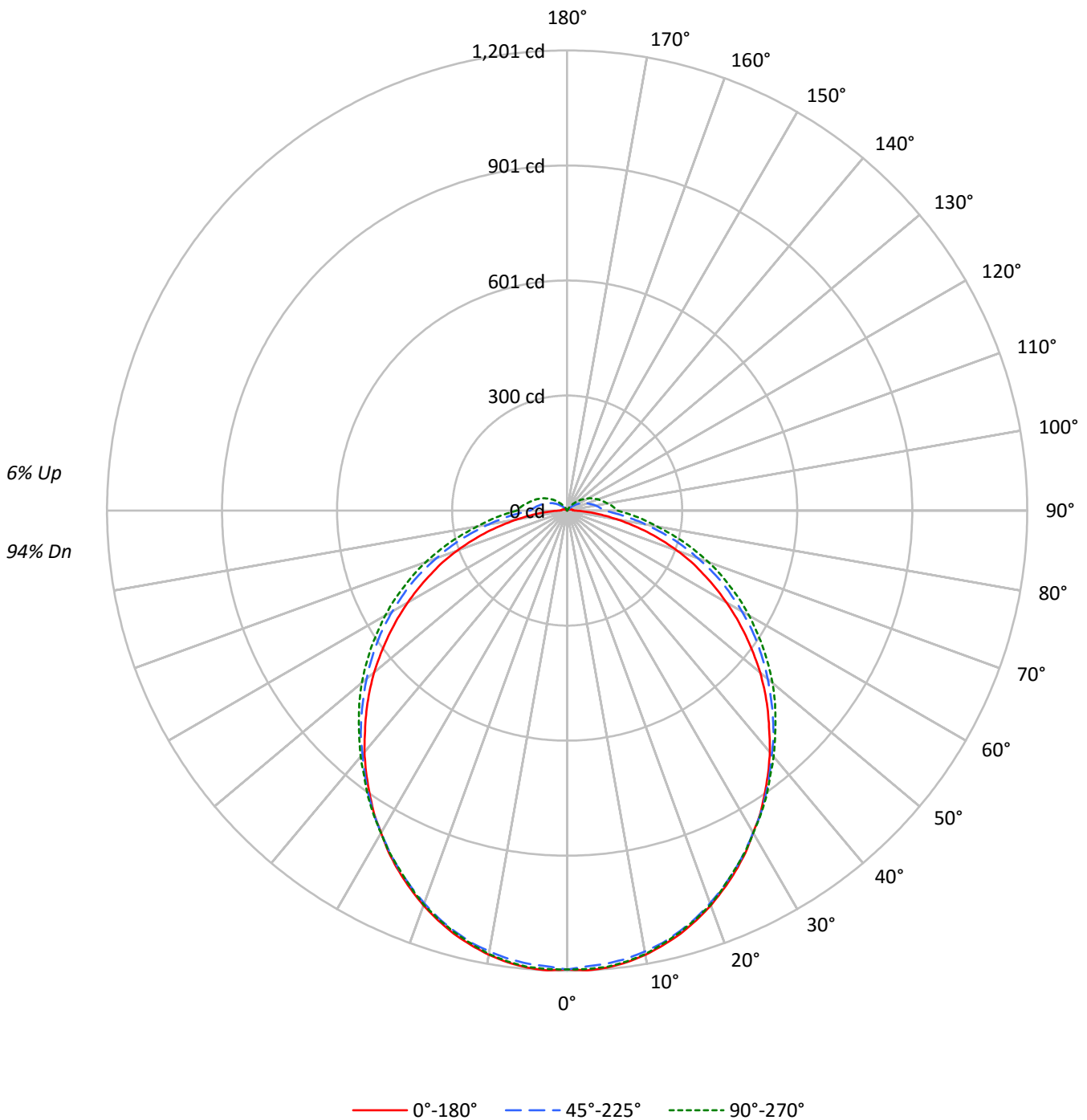
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8512	8512	8512
5°	8528	8347	8371
10°	8467	8191	8174
15°	8366	8006	7927
20°	8230	7780	7680
25°	8068	7537	7378
30°	7871	7272	7103
35°	7687	7027	6852
40°	7500	6769	6597
45°	7289	6548	6371
50°	7088	6308	6169
55°	6845	6080	5933
60°	6581	5821	5692
65°	6303	5548	5419
70°	5990	5178	5138
75°	5491	4818	4794
80°	4841	4381	4415
85°	4229	4065	4261



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	3.1
10°-20°	321.7	8.7
20°-30°	478.4	12.9
30°-40°	566.5	15.3
40°-50°	585.7	15.8
50°-60°	539.5	14.5
60°-70°	436.2	11.8
70°-80°	291.8	7.9
80°-90°	150.8	4.1
90°-100°	85.0	2.3
100°-110°	62.6	1.7
110°-120°	41.9	1.1
120°-130°	23.7	0.6
130°-140°	10.4	0.3
140°-150°	2.1	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	913.4	24.6
0°-40°	1479.9	39.9
0°-60°	2605.2	70.2
0°-90°	3484.1	93.9
90°-120°	189.6	5.1
90°-150°	225.7	6.1
90°-180°	226.0	6.1
0°-180°	3709.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1198	1198	1198	1198	1198	
5°	1198	1195	1187	1196	1195	114
15°	1144	1145	1136	1144	1139	322
25°	1039	1043	1036	1040	1034	478
35°	899	908	904	908	908	563
45°	741	754	760	768	769	572
55°	569	588	607	620	625	509
65°	392	419	447	465	470	389
75°	216	247	284	308	314	229
85°	65	103	144	170	180	67
90°	19	56	96	123	132	13
95°	15	46	86	112	120	12
105°	11	29	65	88	96	11
115°	7	15	46	67	74	7
125°	5	4	27	46	52	4
135°	2	1	9	25	30	2
145°	1	0	0	6	11	0
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°	1197.6	1197.6	1197.6	1197.6	1197.6
2.5°	1201.1	1198.7	1190.5	1198.7	1197.6
5°	1197.6	1195.2	1187.0	1196.4	1195.2
7.5°	1189.3	1188.2	1179.9	1188.2	1187.0
10°	1177.6	1177.6	1168.2	1176.4	1175.2
12.5°	1161.2	1162.3	1155.3	1161.2	1157.6
15°	1143.5	1144.7	1136.5	1143.5	1138.9
17.5°	1121.2	1123.6	1115.4	1121.2	1117.7
20°	1096.6	1098.9	1090.7	1094.2	1094.2
22.5°	1068.4	1073.1	1063.7	1068.4	1064.9
25°	1039.1	1042.6	1035.5	1040.2	1034.4
27.5°	1007.4	1012.1	1003.8	1007.4	1005.0
30°	971.0	978.0	971.0	973.3	972.1
32.5°	938.1	944.0	939.3	941.6	940.4
35°	899.3	907.6	904.0	907.6	907.6
37.5°	861.8	868.8	867.6	872.3	871.2
40°	823.0	832.4	831.2	835.9	838.3
42.5°	780.8	793.7	797.2	803.1	803.1
45°	740.8	753.8	759.6	767.8	769.0
47.5°	699.7	711.5	720.9	732.6	735.0
50°	657.5	670.4	683.3	696.2	699.7
52.5°	612.9	629.3	645.7	659.8	662.2
55°	569.4	588.2	607.0	619.9	624.6
57.5°	524.8	547.1	568.3	582.3	585.9
60°	480.2	503.7	527.2	544.8	548.3
62.5°	436.8	460.2	486.1	506.0	510.7
65°	392.1	419.1	447.3	464.9	469.6
67.5°	351.0	376.9	405.1	426.2	432.1
70°	305.3	332.3	362.8	385.1	392.1
72.5°	260.6	288.8	322.9	347.5	352.2
75°	216.0	246.6	284.1	307.6	313.5
77.5°	172.6	207.8	243.0	268.9	273.6
80°	132.7	167.9	207.8	233.6	238.3
82.5°	96.3	133.8	174.9	199.6	209.0
85°	64.6	103.3	144.4	170.2	179.6
87.5°	41.1	78.7	118.6	145.6	153.8
90°	18.8	56.4	96.3	123.3	131.5
92.5°	16.4	50.5	91.6	117.4	125.6
95°	15.3	45.8	85.7	111.5	119.8
97.5°	14.1	42.3	81.0	105.7	113.9
100°	12.9	37.6	75.1	99.8	106.8
102.5°	11.7	34.0	70.4	93.9	101.0
105°	10.6	29.4	64.6	88.1	96.3
107.5°	9.4	25.8	59.9	83.4	90.4
110°	8.2	22.3	55.2	77.5	85.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	8.2	18.8	50.5	71.6	79.8
115°	7.0	15.3	45.8	66.9	74.0
117.5°	5.9	11.7	41.1	61.1	69.3
120°	5.9	9.4	36.4	56.4	63.4
122.5°	4.7	5.9	31.7	50.5	57.5
125°	4.7	3.5	27.0	45.8	51.7
127.5°	3.5	2.3	22.3	39.9	47.0
130°	3.5	2.3	18.8	35.2	41.1
132.5°	2.3	2.3	14.1	30.5	35.2
135°	2.3	1.2	9.4	24.7	30.5
137.5°	2.3	1.2	5.9	20.0	24.7
140°	1.2	1.2	2.3	15.3	20.0
142.5°	1.2	0.0	0.0	10.6	15.3
145°	1.2	0.0	0.0	5.9	10.6
147.5°	0.0	0.0	0.0	2.3	4.7
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)