

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: P242868

Luminaire Tested: **S125DR-S1270D940-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242868
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-S1270D940-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4175.9 lumens
Efficiency: N/A
Efficacy: 101.6 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

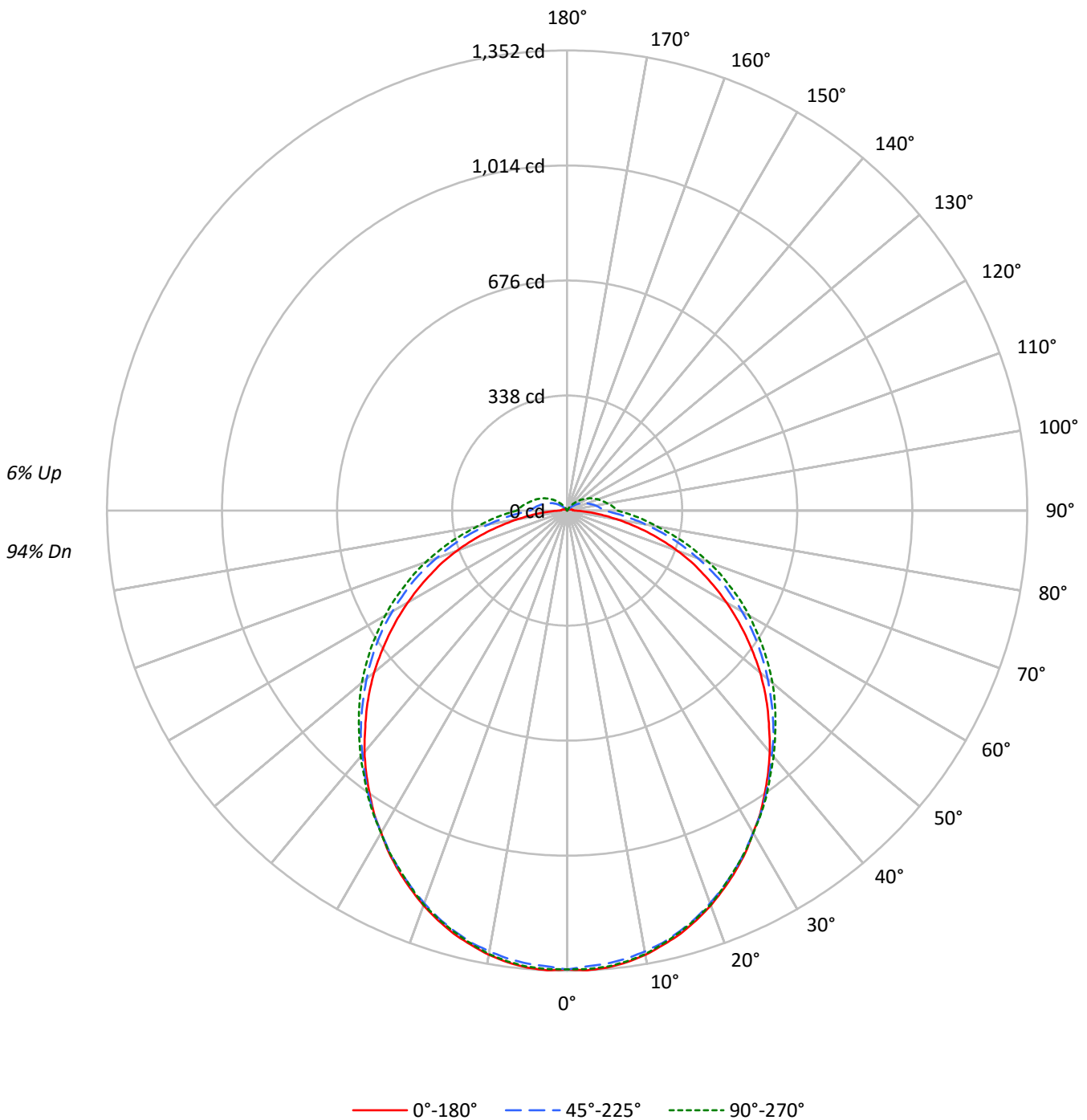
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	9581	9581	9581
5°	9599	9396	9423
10°	9530	9221	9201
15°	9417	9012	8923
20°	9264	8757	8645
25°	9081	8484	8305
30°	8859	8185	7996
35°	8653	7910	7712
40°	8443	7620	7426
45°	8205	7371	7171
50°	7979	7101	6945
55°	7706	6845	6679
60°	7407	6552	6407
65°	7096	6245	6100
70°	6742	5829	5784
75°	6182	5423	5397
80°	5447	4932	4971
85°	4759	4577	4797



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.6	3.1
10°-20°	362.1	8.7
20°-30°	538.5	12.9
30°-40°	637.7	15.3
40°-50°	659.3	15.8
50°-60°	607.3	14.5
60°-70°	491.0	11.8
70°-80°	328.5	7.9
80°-90°	169.8	4.1
90°-100°	95.7	2.3
100°-110°	70.5	1.7
110°-120°	47.2	1.1
120°-130°	26.7	0.6
130°-140°	11.7	0.3
140°-150°	2.3	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1028.2	24.6
0°-40°	1665.9	39.9
0°-60°	2932.5	70.2
0°-90°	3921.8	93.9
90°-120°	213.4	5.1
90°-150°	254.1	6.1
90°-180°	254.0	6.1
0°-180°	4175.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1348	1348	1348	1348	1348	
5°	1348	1345	1336	1347	1345	128
15°	1287	1288	1279	1287	1282	363
25°	1170	1174	1166	1171	1164	538
35°	1012	1022	1018	1022	1022	634
45°	834	848	855	864	866	644
55°	641	662	683	698	703	573
65°	441	472	504	523	529	438
75°	243	278	320	346	353	258
85°	73	116	163	192	202	76
90°	21	63	108	139	148	15
95°	17	52	96	126	135	14
105°	12	33	73	99	108	13
115°	8	17	52	75	83	8
125°	5	4	30	52	58	4
135°	3	1	11	28	34	2
145°	1	0	0	7	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°	1348.0	1348.0	1348.0	1348.0	1348.0
2.5°	1352.0	1349.3	1340.1	1349.3	1348.0
5°	1348.0	1345.4	1336.1	1346.7	1345.4
7.5°	1338.8	1337.4	1328.2	1337.4	1336.1
10°	1325.5	1325.5	1315.0	1324.2	1322.9
12.5°	1307.0	1308.4	1300.4	1307.0	1303.1
15°	1287.2	1288.5	1279.3	1287.2	1281.9
17.5°	1262.1	1264.8	1255.5	1262.1	1258.1
20°	1234.4	1237.0	1227.8	1231.7	1231.7
22.5°	1202.6	1207.9	1197.4	1202.6	1198.7
25°	1169.6	1173.6	1165.6	1170.9	1164.3
27.5°	1133.9	1139.2	1130.0	1133.9	1131.3
30°	1092.9	1100.9	1092.9	1095.6	1094.3
32.5°	1055.9	1062.6	1057.3	1059.9	1058.6
35°	1012.3	1021.6	1017.6	1021.6	1021.6
37.5°	970.0	978.0	976.7	981.9	980.6
40°	926.4	937.0	935.7	941.0	943.6
42.5°	878.9	893.4	897.4	904.0	904.0
45°	833.9	848.5	855.1	864.3	865.6
47.5°	787.7	800.9	811.5	824.7	827.3
50°	740.1	754.6	769.2	783.7	787.7
52.5°	689.9	708.4	726.9	742.7	745.4
55°	641.0	662.1	683.3	697.8	703.1
57.5°	590.7	615.9	639.6	655.5	659.5
60°	540.5	567.0	593.4	613.2	617.2
62.5°	491.6	518.1	547.1	569.6	574.9
65°	441.4	471.8	503.5	523.3	528.6
67.5°	395.2	424.2	455.9	479.7	486.3
70°	343.6	374.0	408.4	433.5	441.4
72.5°	293.4	325.1	363.4	391.2	396.5
75°	243.2	277.5	319.8	346.3	352.9
77.5°	194.3	233.9	273.6	302.6	307.9
80°	149.3	189.0	233.9	263.0	268.3
82.5°	108.4	150.7	196.9	224.7	235.2
85°	72.7	116.3	162.6	191.6	202.2
87.5°	46.3	88.5	133.5	163.9	173.1
90°	21.1	63.4	108.4	138.8	148.0
92.5°	18.5	56.8	103.1	132.2	141.4
95°	17.2	51.5	96.5	125.6	134.8
97.5°	15.9	47.6	91.2	118.9	128.2
100°	14.5	42.3	84.6	112.3	120.3
102.5°	13.2	38.3	79.3	105.7	113.7
105°	11.9	33.0	72.7	99.1	108.4
107.5°	10.6	29.1	67.4	93.8	101.8
110°	9.3	25.1	62.1	87.2	96.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	9.3	21.1	56.8	80.6	89.9
115°	7.9	17.2	51.5	75.3	83.3
117.5°	6.6	13.2	46.3	68.7	78.0
120°	6.6	10.6	41.0	63.4	71.4
122.5°	5.3	6.6	35.7	56.8	64.8
125°	5.3	4.0	30.4	51.5	58.1
127.5°	4.0	2.6	25.1	44.9	52.9
130°	4.0	2.6	21.1	39.6	46.3
132.5°	2.6	2.6	15.9	34.4	39.6
135°	2.6	1.3	10.6	27.8	34.4
137.5°	2.6	1.3	6.6	22.5	27.8
140°	1.3	1.3	2.6	17.2	22.5
142.5°	1.3	0.0	0.0	11.9	17.2
145°	1.3	0.0	0.0	6.6	11.9
147.5°	0.0	0.0	0.0	2.6	5.3
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)