

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: P242853

Luminaire Tested: **S125DR-S1270D840-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242853
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-S1270D840-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4729.2 lumens
Efficiency: N/A
Efficacy: 115.1 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

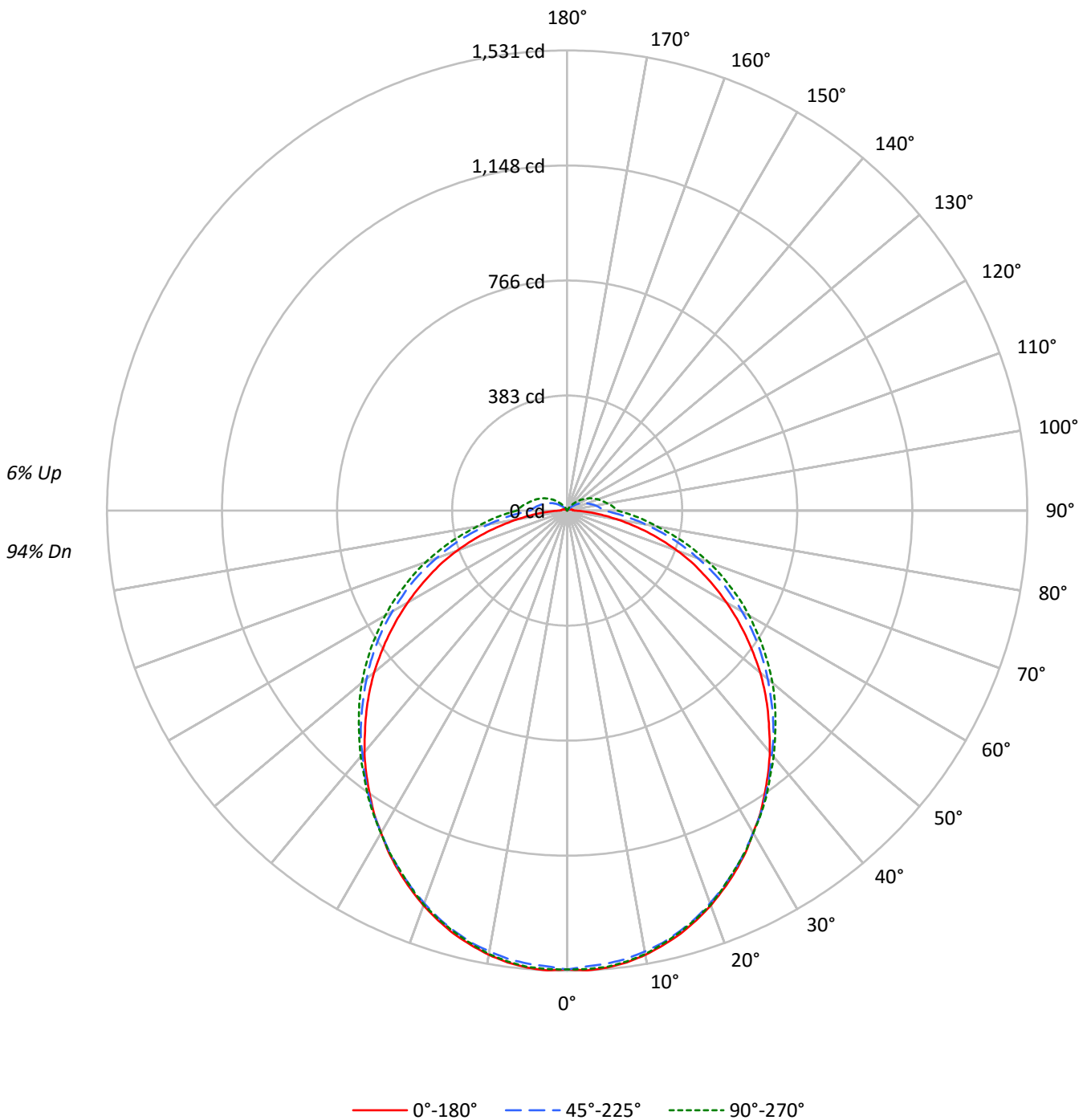
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	10850	10850	10850
5°	10871	10641	10671
10°	10793	10442	10421
15°	10665	10206	10105
20°	10491	9917	9791
25°	10284	9609	9405
30°	10034	9270	9056
35°	9800	8959	8734
40°	9562	8630	8410
45°	9293	8348	8122
50°	9036	8041	7865
55°	8727	7751	7563
60°	8388	7419	7256
65°	8036	7072	6909
70°	7635	6601	6551
75°	7001	6142	6111
80°	6169	5585	5629
85°	5387	5182	5433



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.5	3.1
10°-20°	410.1	8.7
20°-30°	609.8	12.9
30°-40°	722.2	15.3
40°-50°	746.7	15.8
50°-60°	687.8	14.5
60°-70°	556.0	11.8
70°-80°	372.0	7.9
80°-90°	192.3	4.1
90°-100°	108.3	2.3
100°-110°	79.8	1.7
110°-120°	53.5	1.1
120°-130°	30.3	0.6
130°-140°	13.2	0.3
140°-150°	2.6	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1164.4	24.6
0°-40°	1886.6	39.9
0°-60°	3321.1	70.2
0°-90°	4441.5	93.9
90°-120°	241.6	5.1
90°-150°	287.8	6.1
90°-180°	288.0	6.1
0°-180°	4729.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1527	1527	1527	1527	1527	
5°	1527	1524	1513	1525	1524	145
15°	1458	1459	1449	1458	1452	411
25°	1325	1329	1320	1326	1319	610
35°	1146	1157	1152	1157	1157	718
45°	944	961	968	979	980	729
55°	726	750	774	790	796	649
65°	500	534	570	593	599	496
75°	275	314	362	392	400	292
85°	82	132	184	217	229	86
90°	24	72	123	157	168	17
95°	20	58	109	142	153	15
105°	14	37	82	112	123	14
115°	9	20	58	85	94	9
125°	6	4	34	58	66	5
135°	3	2	12	31	39	2
145°	2	0	0	8	14	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°	1526.6	1526.6	1526.6	1526.6	1526.6
2.5°	1531.1	1528.1	1517.7	1528.1	1526.6
5°	1526.6	1523.6	1513.2	1525.1	1523.6
7.5°	1516.2	1514.7	1504.2	1514.7	1513.2
10°	1501.2	1501.2	1489.2	1499.7	1498.2
12.5°	1480.2	1481.7	1472.8	1480.2	1475.7
15°	1457.8	1459.3	1448.8	1457.8	1451.8
17.5°	1429.3	1432.3	1421.9	1429.3	1424.9
20°	1397.9	1400.9	1390.4	1394.9	1394.9
22.5°	1362.0	1368.0	1356.0	1362.0	1357.5
25°	1324.6	1329.1	1320.1	1326.1	1318.6
27.5°	1284.2	1290.2	1279.7	1284.2	1281.2
30°	1237.8	1246.7	1237.8	1240.8	1239.3
32.5°	1195.9	1203.3	1197.4	1200.4	1198.9
35°	1146.5	1156.9	1152.5	1156.9	1156.9
37.5°	1098.6	1107.6	1106.1	1112.0	1110.5
40°	1049.2	1061.2	1059.7	1065.6	1068.6
42.5°	995.3	1011.8	1016.3	1023.7	1023.7
45°	944.4	960.9	968.4	978.8	980.3
47.5°	892.0	907.0	919.0	933.9	936.9
50°	838.2	854.6	871.1	887.5	892.0
52.5°	781.3	802.2	823.2	841.1	844.1
55°	725.9	749.8	773.8	790.3	796.2
57.5°	669.0	697.5	724.4	742.4	746.9
60°	612.1	642.1	672.0	694.5	699.0
62.5°	556.8	586.7	619.6	645.1	651.1
65°	499.9	534.3	570.2	592.7	598.7
67.5°	447.5	480.4	516.4	543.3	550.8
70°	389.1	423.6	462.5	490.9	499.9
72.5°	332.3	368.2	411.6	443.0	449.0
75°	275.4	314.3	362.2	392.1	399.6
77.5°	220.0	264.9	309.8	342.7	348.7
80°	169.1	214.0	264.9	297.8	303.8
82.5°	122.7	170.6	223.0	254.4	266.4
85°	82.3	131.7	184.1	217.0	229.0
87.5°	52.4	100.3	151.2	185.6	196.1
90°	23.9	71.8	122.7	157.2	167.6
92.5°	21.0	64.4	116.7	149.7	160.1
95°	19.5	58.4	109.3	142.2	152.7
97.5°	18.0	53.9	103.3	134.7	145.2
100°	16.5	47.9	95.8	127.2	136.2
102.5°	15.0	43.4	89.8	119.7	128.7
105°	13.5	37.4	82.3	112.3	122.7
107.5°	12.0	32.9	76.3	106.3	115.2
110°	10.5	28.4	70.3	98.8	109.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	10.5	23.9	64.4	91.3	101.8
115°	9.0	19.5	58.4	85.3	94.3
117.5°	7.5	15.0	52.4	77.8	88.3
120°	7.5	12.0	46.4	71.8	80.8
122.5°	6.0	7.5	40.4	64.4	73.3
125°	6.0	4.5	34.4	58.4	65.9
127.5°	4.5	3.0	28.4	50.9	59.9
130°	4.5	3.0	23.9	44.9	52.4
132.5°	3.0	3.0	18.0	38.9	44.9
135°	3.0	1.5	12.0	31.4	38.9
137.5°	3.0	1.5	7.5	25.4	31.4
140°	1.5	1.5	3.0	19.5	25.4
142.5°	1.5	0.0	0.0	13.5	19.5
145°	1.5	0.0	0.0	7.5	13.5
147.5°	0.0	0.0	0.0	3.0	6.0
150°	0.0	0.0	0.0	0.0	1.5
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)