

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: P242863

Luminaire Tested: **S125DR-S1270D935-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242863
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-S1270D935-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4032.1 lumens
Efficiency: N/A
Efficacy: 98.1 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

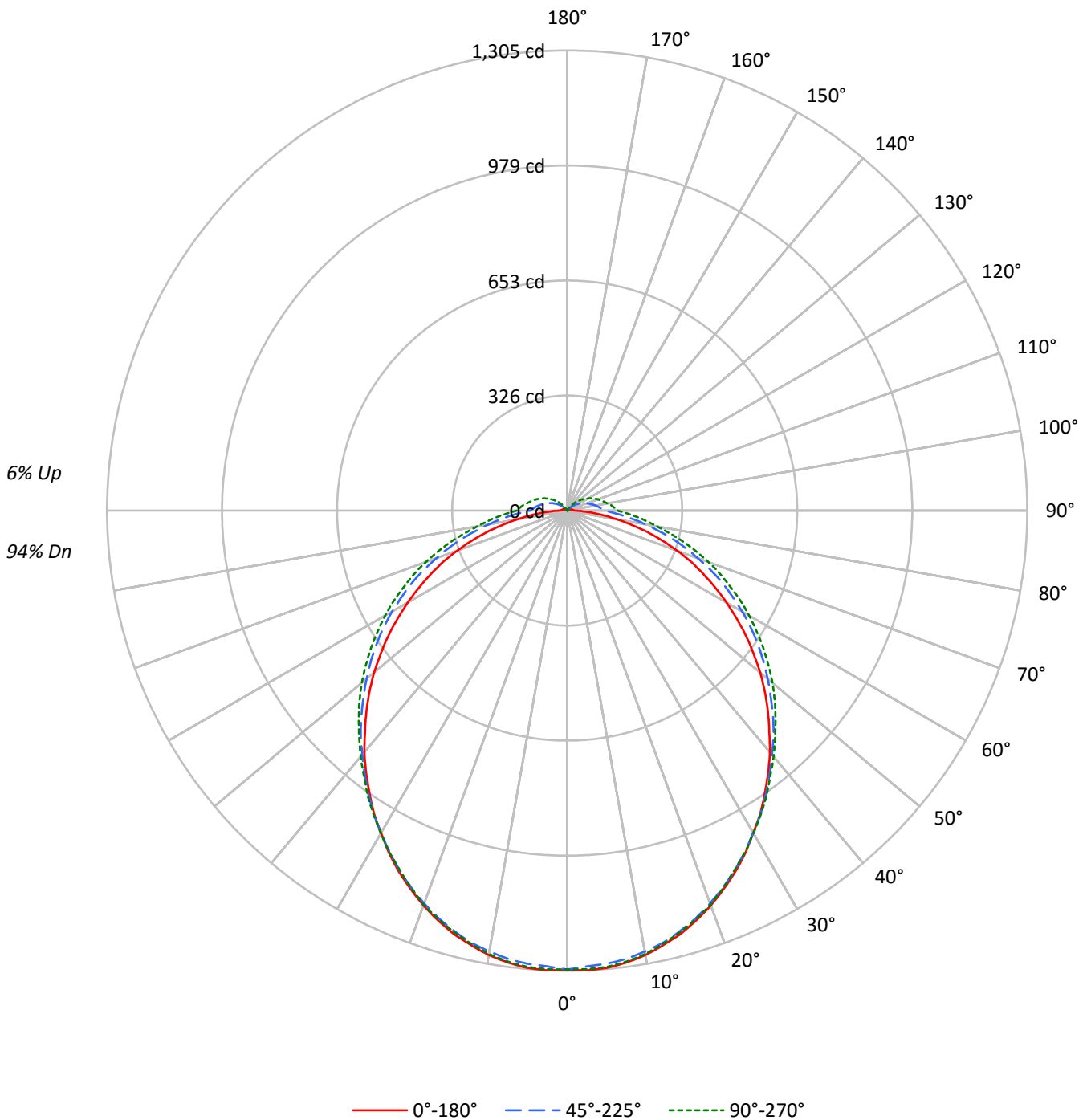
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P242863

CATALOG NUMBER: S125DR-S1270D935-X4F0-XX-UDD-D-W

Luminous Intensity Polar Plot





TEST NUMBER: P242863

CATALOG NUMBER: S125DR-S1270D935-X4F0-XX-UDD-D-W

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°	9251	9251	9251
5°	9269	9072	9098
10°	9202	8903	8884
15°	9093	8702	8616
20°	8944	8456	8347
25°	8768	8192	8019
30°	8554	7903	7721
35°	8355	7638	7447
40°	8152	7358	7170
45°	7923	7117	6924
50°	7704	6856	6705
55°	7440	6608	6449
60°	7152	6326	6186
65°	6852	6030	5890
70°	6510	5628	5585
75°	5969	5236	5210
80°	5260	4763	4799
85°	4595	4419	4631



TEST NUMBER: P242863

CATALOG NUMBER: S125DR-S1270D935-X4F0-XX-UDD-D-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.2	3.1
10°-20°	349.6	8.7
20°-30°	519.9	12.9
30°-40°	615.8	15.3
40°-50°	636.6	15.8
50°-60°	586.4	14.5
60°-70°	474.1	11.8
70°-80°	317.2	7.9
80°-90°	164.0	4.1
90°-100°	92.3	2.3
100°-110°	68.1	1.7
110°-120°	45.6	1.1
120°-130°	25.8	0.6
130°-140°	11.3	0.3
140°-150°	2.2	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	992.7	24.6
0°-40°	1608.5	39.9
0°-60°	2831.5	70.2
0°-90°	3786.7	93.9
90°-120°	206.0	5.1
90°-150°	245.4	6.1
90°-180°	245.0	6.1
0°-180°	4032.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1302	1302	1302	1302	1302	
5°	1302	1299	1290	1300	1299	124
15°	1243	1244	1235	1243	1238	350
25°	1129	1133	1126	1131	1124	520
35°	978	986	983	986	986	612
45°	805	819	826	834	836	621
55°	619	639	660	674	679	553
65°	426	456	486	505	510	423
75°	235	268	309	334	341	249
85°	70	112	157	185	195	73
90°	20	61	105	134	143	14
95°	17	50	93	121	130	13
105°	12	32	70	96	105	12
115°	8	17	50	73	80	8
125°	5	4	29	50	56	4
135°	3	1	10	27	33	2
145°	1	0	0	6	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



TEST NUMBER: P242863

CATALOG NUMBER: S125DR-S1270D935-X4F0-XX-UDD-D-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1301.6	1301.6	1301.6	1301.6	1301.6
2.5°	1305.4	1302.9	1293.9	1302.9	1301.6
5°	1301.6	1299.0	1290.1	1300.3	1299.0
7.5°	1292.7	1291.4	1282.4	1291.4	1290.1
10°	1279.9	1279.9	1269.7	1278.6	1277.3
12.5°	1262.0	1263.3	1255.7	1262.0	1258.2
15°	1242.9	1244.2	1235.2	1242.9	1237.8
17.5°	1218.6	1221.2	1212.3	1218.6	1214.8
20°	1191.8	1194.4	1185.5	1189.3	1189.3
22.5°	1161.2	1166.3	1156.1	1161.2	1157.4
25°	1129.3	1133.1	1125.5	1130.6	1124.2
27.5°	1094.9	1100.0	1091.0	1094.9	1092.3
30°	1055.3	1063.0	1055.3	1057.9	1056.6
32.5°	1019.6	1026.0	1020.9	1023.4	1022.1
35°	977.5	986.4	982.6	986.4	986.4
37.5°	936.6	944.3	943.0	948.1	946.8
40°	894.5	904.7	903.5	908.6	911.1
42.5°	848.6	862.6	866.5	872.8	872.8
45°	805.2	819.2	825.6	834.5	835.8
47.5°	760.5	773.3	783.5	796.3	798.8
50°	714.6	728.6	742.7	756.7	760.5
52.5°	666.1	684.0	701.8	717.2	719.7
55°	618.9	639.3	659.7	673.8	678.9
57.5°	570.4	594.6	617.6	632.9	636.8
60°	521.9	547.4	573.0	592.1	595.9
62.5°	474.7	500.2	528.3	550.0	555.1
65°	426.2	455.6	486.2	505.3	510.4
67.5°	381.5	409.6	440.2	463.2	469.6
70°	331.8	361.1	394.3	418.6	426.2
72.5°	283.3	313.9	350.9	377.7	382.8
75°	234.8	268.0	308.8	334.3	340.7
77.5°	187.6	225.9	264.1	292.2	297.3
80°	144.2	182.5	225.9	253.9	259.0
82.5°	104.6	145.5	190.1	216.9	227.1
85°	70.2	112.3	157.0	185.0	195.2
87.5°	44.7	85.5	128.9	158.2	167.2
90°	20.4	61.3	104.6	134.0	142.9
92.5°	17.9	54.9	99.5	127.6	136.5
95°	16.6	49.8	93.2	121.2	130.2
97.5°	15.3	45.9	88.0	114.8	123.8
100°	14.0	40.8	81.7	108.5	116.1
102.5°	12.8	37.0	76.6	102.1	109.7
105°	11.5	31.9	70.2	95.7	104.6
107.5°	10.2	28.1	65.1	90.6	98.3
110°	8.9	24.2	60.0	84.2	93.2



TEST NUMBER: P242863

CATALOG NUMBER: S125DR-S1270D935-X4F0-XX-UDD-D-W

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	8.9	20.4	54.9	77.8	86.8
115°	7.7	16.6	49.8	72.7	80.4
117.5°	6.4	12.8	44.7	66.4	75.3
120°	6.4	10.2	39.6	61.3	68.9
122.5°	5.1	6.4	34.5	54.9	62.5
125°	5.1	3.8	29.3	49.8	56.1
127.5°	3.8	2.6	24.2	43.4	51.0
130°	3.8	2.6	20.4	38.3	44.7
132.5°	2.6	2.6	15.3	33.2	38.3
135°	2.6	1.3	10.2	26.8	33.2
137.5°	2.6	1.3	6.4	21.7	26.8
140°	1.3	1.3	2.6	16.6	21.7
142.5°	1.3	0.0	0.0	11.5	16.6
145°	1.3	0.0	0.0	6.4	11.5
147.5°	0.0	0.0	0.0	2.6	5.1
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)