

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: P242848

Luminaire Tested: **S125DR-S1270D835-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242848
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-S1270D835-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4683.1 lumens
Efficiency: N/A
Efficacy: 113.9 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

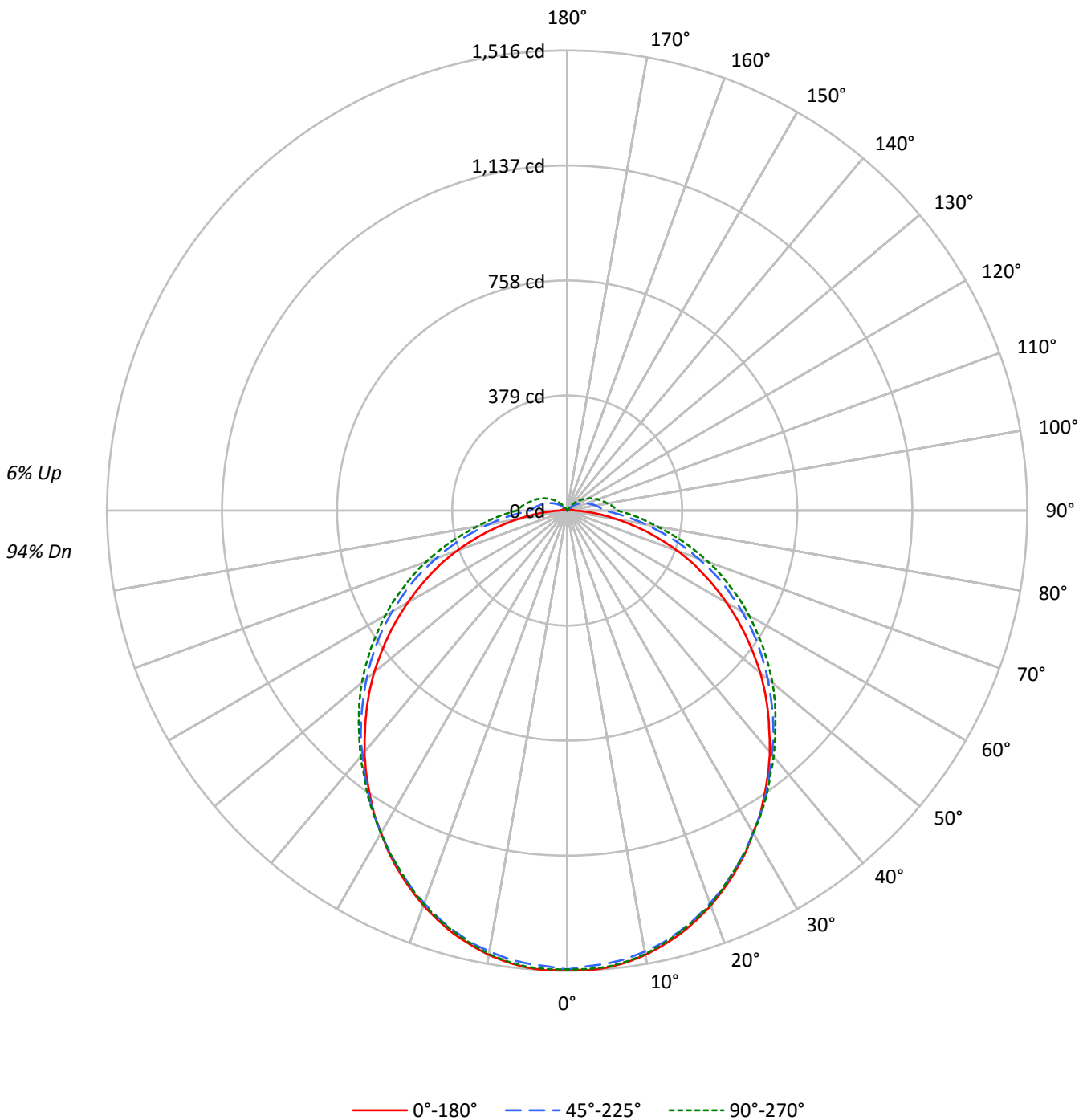
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	10744	10744	10744
5°	10765	10537	10567
10°	10688	10340	10319
15°	10561	10107	10006
20°	10389	9820	9695
25°	10184	9515	9313
30°	9936	9180	8968
35°	9704	8871	8649
40°	9468	8545	8328
45°	9202	8266	8043
50°	8948	7963	7788
55°	8641	7675	7490
60°	8308	7348	7185
65°	7958	7004	6841
70°	7560	6537	6487
75°	6932	6083	6051
80°	6110	5530	5575
85°	5335	5131	5381



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.1	3.1
10°-20°	406.1	8.7
20°-30°	603.9	12.9
30°-40°	715.2	15.3
40°-50°	739.4	15.8
50°-60°	681.1	14.5
60°-70°	550.6	11.8
70°-80°	368.4	7.9
80°-90°	190.4	4.1
90°-100°	107.3	2.3
100°-110°	79.1	1.7
110°-120°	52.9	1.1
120°-130°	30.0	0.6
130°-140°	13.1	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°	1153.0	24.6
0°-40°	1868.2	39.9
0°-60°	3288.6	70.2
0°-90°	4398.1	93.9
90°-120°	239.3	5.1
90°-150°	285.0	6.1
90°-180°	285.0	6.1
0°-180°	4683.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1512	1512	1512	1512	1512	
5°	1512	1509	1498	1510	1509	143
15°	1444	1445	1435	1444	1438	407
25°	1312	1316	1307	1313	1306	604
35°	1135	1146	1141	1146	1146	711
45°	935	952	959	969	971	722
55°	719	742	766	782	788	642
65°	495	529	565	587	593	491
75°	273	311	359	388	396	289
85°	82	130	182	215	227	85
90°	24	71	122	156	166	16
95°	19	58	108	141	151	15
105°	13	37	82	111	122	14
115°	9	19	58	84	93	9
125°	6	4	34	58	65	5
135°	3	2	12	31	38	2
145°	2	0	0	7	13	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°	1511.7	1511.7	1511.7	1511.7	1511.7
2.5°	1516.2	1513.2	1502.8	1513.2	1511.7
5°	1511.7	1508.8	1498.4	1510.2	1508.8
7.5°	1501.3	1499.9	1489.5	1499.9	1498.4
10°	1486.5	1486.5	1474.7	1485.0	1483.6
12.5°	1465.8	1467.3	1458.4	1465.8	1461.3
15°	1443.5	1445.0	1434.7	1443.5	1437.6
17.5°	1415.4	1418.3	1408.0	1415.4	1410.9
20°	1384.3	1387.2	1376.8	1381.3	1381.3
22.5°	1348.7	1354.6	1342.8	1348.7	1344.2
25°	1311.6	1316.1	1307.2	1313.1	1305.7
27.5°	1271.6	1277.6	1267.2	1271.6	1268.7
30°	1225.7	1234.6	1225.7	1228.6	1227.2
32.5°	1184.2	1191.6	1185.7	1188.6	1187.1
35°	1135.3	1145.6	1141.2	1145.6	1145.6
37.5°	1087.8	1096.7	1095.3	1101.2	1099.7
40°	1038.9	1050.8	1049.3	1055.2	1058.2
42.5°	985.6	1001.9	1006.3	1013.7	1013.7
45°	935.2	951.5	958.9	969.3	970.8
47.5°	883.3	898.1	910.0	924.8	927.8
50°	830.0	846.3	862.6	878.9	883.3
52.5°	773.6	794.4	815.1	832.9	835.9
55°	718.8	742.5	766.2	782.5	788.5
57.5°	662.5	690.6	717.3	735.1	739.6
60°	606.2	635.8	665.5	687.7	692.1
62.5°	551.3	581.0	613.6	638.8	644.7
65°	495.0	529.1	564.7	586.9	592.8
67.5°	443.1	475.7	511.3	538.0	545.4
70°	385.3	419.4	458.0	486.1	495.0
72.5°	329.0	364.6	407.6	438.7	444.6
75°	272.7	311.2	358.7	388.3	395.7
77.5°	217.9	262.3	306.8	339.4	345.3
80°	167.5	211.9	262.3	294.9	300.9
82.5°	121.5	169.0	220.8	252.0	263.8
85°	81.5	130.4	182.3	214.9	226.8
87.5°	51.9	99.3	149.7	183.8	194.2
90°	23.7	71.1	121.5	155.6	166.0
92.5°	20.7	63.7	115.6	148.2	158.6
95°	19.3	57.8	108.2	140.8	151.2
97.5°	17.8	53.4	102.3	133.4	143.8
100°	16.3	47.4	94.9	126.0	134.9
102.5°	14.8	43.0	88.9	118.6	127.5
105°	13.3	37.1	81.5	111.2	121.5
107.5°	11.9	32.6	75.6	105.2	114.1
110°	10.4	28.2	69.7	97.8	108.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	10.4	23.7	63.7	90.4	100.8
115°	8.9	19.3	57.8	84.5	93.4
117.5°	7.4	14.8	51.9	77.1	87.4
120°	7.4	11.9	45.9	71.1	80.0
122.5°	5.9	7.4	40.0	63.7	72.6
125°	5.9	4.4	34.1	57.8	65.2
127.5°	4.4	3.0	28.2	50.4	59.3
130°	4.4	3.0	23.7	44.5	51.9
132.5°	3.0	3.0	17.8	38.5	44.5
135°	3.0	1.5	11.9	31.1	38.5
137.5°	3.0	1.5	7.4	25.2	31.1
140°	1.5	1.5	3.0	19.3	25.2
142.5°	1.5	0.0	0.0	13.3	19.3
145°	1.5	0.0	0.0	7.4	13.3
147.5°	0.0	0.0	0.0	3.0	5.9
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)