

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: P243699

Luminaire Tested: **S125DR-H1270D927-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243699
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-56)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DR-H1270D927-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3743.6 lumens
Efficiency: N/A
Efficacy: 99.3 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

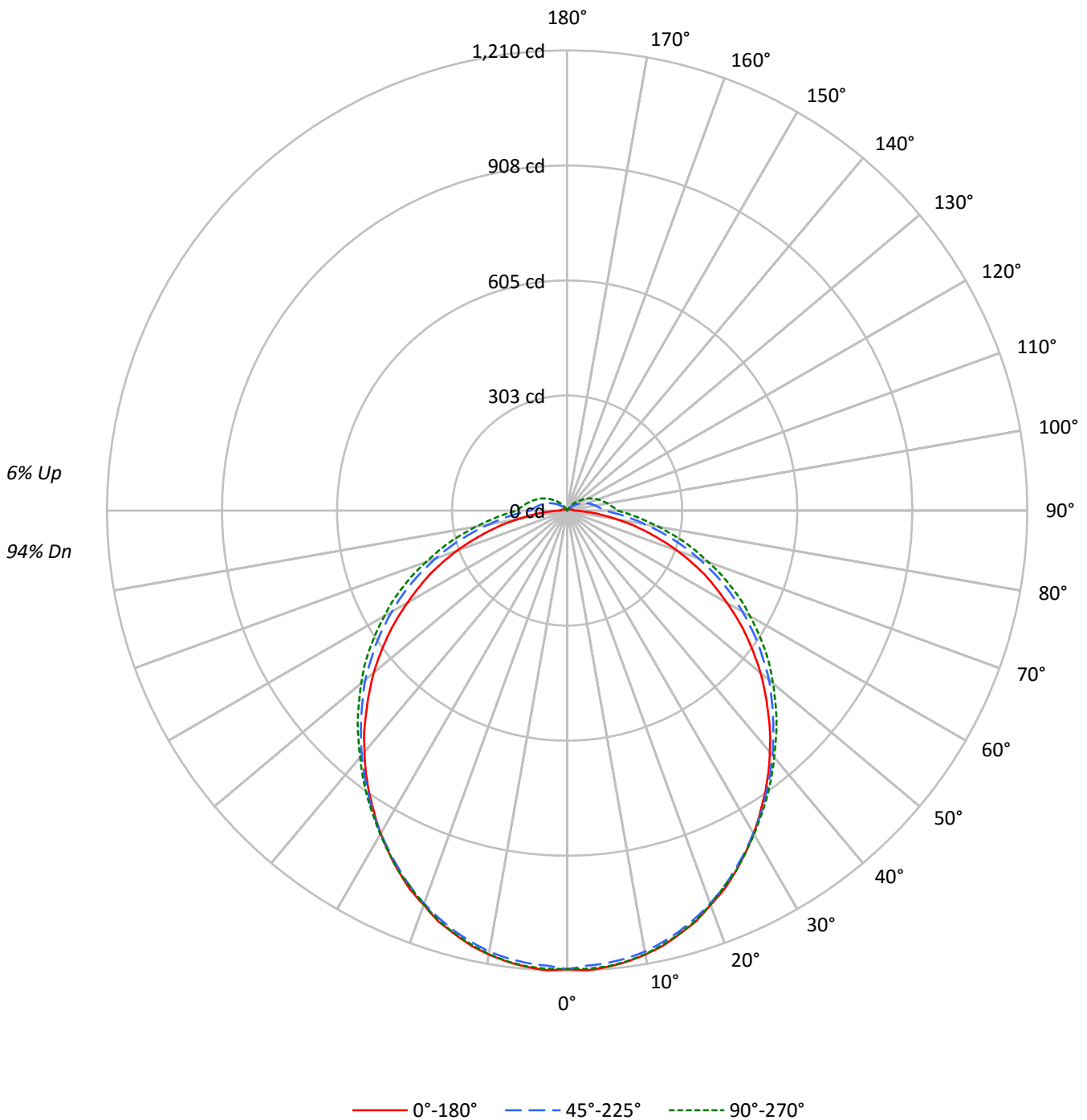
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8569	8569	8569
5°	8578	8400	8428
10°	8524	8258	8239
15°	8421	8062	8004
20°	8279	7844	7735
25°	8132	7592	7471
30°	7949	7336	7182
35°	7753	7085	6924
40°	7555	6842	6665
45°	7346	6599	6453
50°	7160	6398	6229
55°	6926	6150	6022
60°	6642	5880	5760
65°	6413	5597	5504
70°	6034	5248	5170
75°	5524	4838	4874
80°	4918	4394	4500
85°	4379	4110	4283



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.1	3.0
10°-20°	324.1	8.7
20°-30°	482.5	12.9
30°-40°	571.6	15.3
40°-50°	591.4	15.8
50°-60°	545.5	14.6
60°-70°	440.8	11.8
70°-80°	294.6	7.9
80°-90°	151.9	4.1
90°-100°	85.2	2.3
100°-110°	63.2	1.7
110°-120°	42.1	1.1
120°-130°	23.5	0.6
130°-140°	10.6	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°	920.7	24.6
0°-40°	1492.3	39.9
0°-60°	2629.3	70.2
0°-90°	3516.7	93.9
90°-120°	190.6	5.1
90°-150°	226.9	6.1
90°-180°	227.0	6.1
0°-180°	3743.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1206	1206	1206	1206	1206	
5°	1205	1203	1194	1203	1203	114
15°	1151	1154	1144	1151	1150	325
25°	1047	1052	1043	1049	1047	482
35°	907	914	912	916	917	567
45°	747	759	766	778	779	577
55°	576	594	614	628	634	515
65°	399	422	451	471	477	393
75°	217	250	285	310	319	231
85°	67	105	146	172	180	69
90°	19	56	97	124	133	13
95°	16	47	86	111	119	12
105°	11	30	66	89	97	12
115°	8	16	46	67	75	7
125°	4	4	27	44	51	4
135°	2	2	10	26	30	2
145°	1	0	0	7	10	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°	1205.7	1205.7	1205.7	1205.7	1205.7
2.5°	1210.1	1206.8	1197.9	1206.8	1205.7
5°	1204.6	1203.4	1194.5	1203.4	1203.4
7.5°	1196.8	1195.6	1187.8	1196.8	1195.6
10°	1185.6	1185.6	1177.8	1184.5	1184.5
12.5°	1171.1	1171.1	1162.2	1170.0	1167.8
15°	1151.1	1154.4	1144.4	1151.1	1150.0
17.5°	1131.0	1131.0	1123.2	1128.8	1128.8
20°	1103.2	1107.6	1099.8	1105.4	1102.0
22.5°	1078.6	1080.9	1073.1	1078.6	1073.1
25°	1047.4	1051.9	1043.0	1048.6	1047.4
27.5°	1015.1	1018.5	1011.8	1018.5	1015.1
30°	980.6	983.9	979.5	983.9	982.8
32.5°	943.8	950.5	947.2	950.5	949.4
35°	907.0	913.7	911.5	916.0	917.1
37.5°	869.2	875.8	875.8	881.4	882.5
40°	829.0	838.0	840.2	848.0	846.9
42.5°	790.0	799.0	802.3	812.3	812.3
45°	746.6	758.8	765.5	777.8	778.9
47.5°	705.4	718.7	728.8	739.9	742.1
50°	664.1	676.4	693.1	704.2	706.5
52.5°	619.5	635.1	651.9	667.5	671.9
55°	576.1	593.9	614.0	628.5	634.0
57.5°	531.5	550.5	572.7	590.6	595.0
60°	484.7	507.0	532.6	550.5	554.9
62.5°	441.3	465.8	492.5	511.5	518.1
65°	398.9	422.3	451.3	471.3	476.9
67.5°	353.2	378.9	408.9	431.2	436.8
70°	307.5	335.4	367.7	388.9	394.5
72.5°	260.7	291.9	326.5	349.9	356.6
75°	217.3	249.6	285.3	309.8	318.7
77.5°	176.1	209.5	245.1	270.8	278.6
80°	134.8	169.4	208.4	235.1	242.9
82.5°	98.1	134.8	174.9	201.7	209.5
85°	66.9	104.7	146.0	171.6	180.5
87.5°	41.2	78.0	120.3	146.0	154.9
90°	18.9	55.7	96.9	123.7	132.6
92.5°	16.7	51.3	91.4	118.1	125.9
95°	15.6	46.8	85.8	111.4	119.2
97.5°	14.5	42.3	80.2	105.9	113.7
100°	13.4	37.9	75.8	100.3	108.1
102.5°	12.3	34.5	70.2	94.7	101.4
105°	11.1	30.1	65.7	89.1	96.9
107.5°	10.0	25.6	61.3	83.6	91.4
110°	8.9	22.3	55.7	78.0	85.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	7.8	18.9	51.3	72.4	80.2
115°	7.8	15.6	45.7	66.9	74.7
117.5°	6.7	12.3	40.1	61.3	69.1
120°	5.6	8.9	35.7	55.7	63.5
122.5°	5.6	6.7	31.2	50.1	57.9
125°	4.5	4.5	26.7	43.5	51.3
127.5°	4.5	3.3	22.3	39.0	44.6
130°	3.3	2.2	18.9	34.5	40.1
132.5°	3.3	2.2	14.5	30.1	35.7
135°	2.2	2.2	10.0	25.6	30.1
137.5°	2.2	1.1	6.7	20.1	25.6
140°	1.1	1.1	2.2	15.6	20.1
142.5°	1.1	1.1	1.1	11.1	15.6
145°	1.1	0.0	0.0	6.7	10.0
147.5°	1.1	0.0	0.0	2.2	5.6
150°	0.0	0.0	0.0	0.0	1.1
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)