

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: P243701

Luminaire Tested: **S125DR-H610D830-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243701
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-H610D830-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2111.1 lumens
Efficiency: N/A
Efficacy: 122.7 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

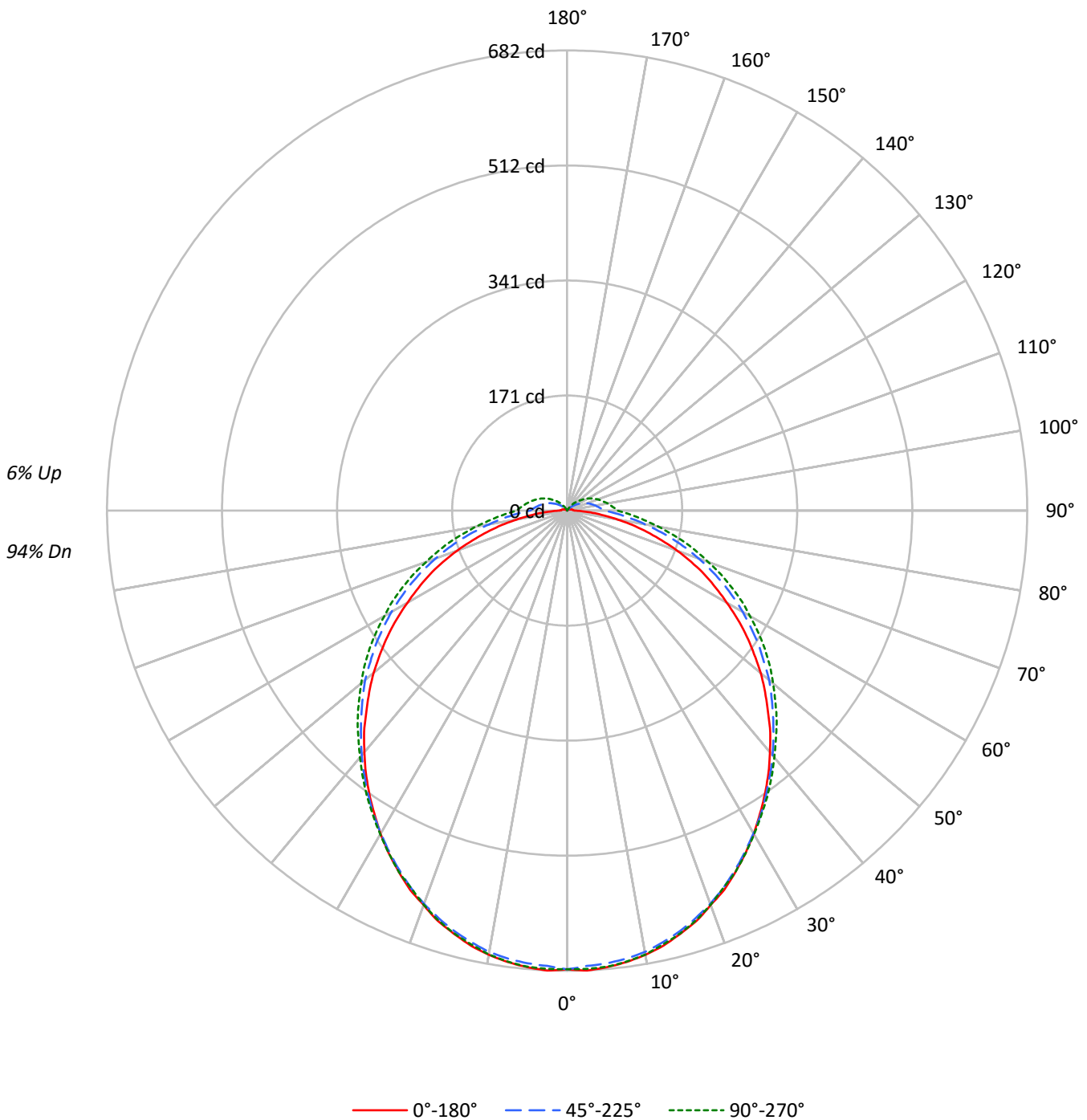
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4832	4832	4832
5°	4837	4737	4753
10°	4807	4657	4646
15°	4749	4546	4514
20°	4669	4424	4362
25°	4586	4281	4213
30°	4483	4136	4050
35°	4372	3995	3905
40°	4261	3859	3759
45°	4143	3721	3639
50°	4037	3608	3513
55°	3906	3468	3396
60°	3745	3317	3248
65°	3617	3157	3103
70°	3402	2960	2914
75°	3114	2728	2748
80°	2773	2477	2538
85°	2468	2317	2415



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.3	3.0
10°-20°	182.8	8.7
20°-30°	272.1	12.9
30°-40°	322.4	15.3
40°-50°	333.5	15.8
50°-60°	307.6	14.6
60°-70°	248.6	11.8
70°-80°	166.1	7.9
80°-90°	85.7	4.1
90°-100°	48.1	2.3
100°-110°	35.7	1.7
110°-120°	23.7	1.1
120°-130°	13.3	0.6
130°-140°	6.0	0.3
140°-150°	1.3	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	519.2	24.6
0°-40°	841.6	39.9
0°-60°	1482.7	70.2
0°-90°	1983.1	93.9
90°-120°	107.5	5.1
90°-150°	128.0	6.1
90°-180°	128.0	6.1
0°-180°	2111.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	680	680	680	680	680	
5°	679	679	674	679	679	65
15°	649	651	645	649	648	183
25°	591	593	588	591	591	272
35°	512	515	514	516	517	320
45°	421	428	432	439	439	325
55°	325	335	346	354	358	290
65°	225	238	254	266	269	222
75°	122	141	161	175	180	130
85°	38	59	82	97	102	39
90°	11	31	55	70	75	7
95°	9	26	48	63	67	7
105°	6	17	37	50	55	7
115°	4	9	26	38	42	4
125°	2	2	15	24	29	2
135°	1	1	6	14	17	1
145°	1	0	0	4	6	0
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°	679.9	679.9	679.9	679.9	679.9
2.5°	682.4	680.5	675.5	680.5	679.9
5°	679.3	678.6	673.6	678.6	678.6
7.5°	674.9	674.2	669.8	674.9	674.2
10°	668.6	668.6	664.2	668.0	668.0
12.5°	660.4	660.4	655.4	659.8	658.5
15°	649.1	651.0	645.3	649.1	648.5
17.5°	637.8	637.8	633.4	636.5	636.5
20°	622.1	624.6	620.2	623.3	621.5
22.5°	608.3	609.5	605.1	608.3	605.1
25°	590.7	593.2	588.2	591.3	590.7
27.5°	572.5	574.3	570.6	574.3	572.5
30°	553.0	554.9	552.3	554.9	554.2
32.5°	532.2	536.0	534.1	536.0	535.4
35°	511.5	515.3	514.0	516.5	517.2
37.5°	490.1	493.9	493.9	497.0	497.7
40°	467.5	472.5	473.8	478.2	477.6
42.5°	445.5	450.5	452.4	458.1	458.1
45°	421.0	427.9	431.7	438.6	439.2
47.5°	397.8	405.3	411.0	417.2	418.5
50°	374.5	381.4	390.8	397.1	398.4
52.5°	349.4	358.2	367.6	376.4	378.9
55°	324.9	334.9	346.2	354.4	357.5
57.5°	299.7	310.4	323.0	333.0	335.6
60°	273.3	285.9	300.4	310.4	312.9
62.5°	248.8	262.7	277.7	288.4	292.2
65°	225.0	238.2	254.5	265.8	268.9
67.5°	199.2	213.6	230.6	243.2	246.3
70°	173.4	189.1	207.4	219.3	222.4
72.5°	147.0	164.6	184.1	197.3	201.1
75°	122.5	140.8	160.9	174.7	179.7
77.5°	99.3	118.1	138.2	152.7	157.1
80°	76.0	95.5	117.5	132.6	137.0
82.5°	55.3	76.0	98.7	113.7	118.1
85°	37.7	59.1	82.3	96.8	101.8
87.5°	23.2	44.0	67.9	82.3	87.3
90°	10.7	31.4	54.7	69.7	74.8
92.5°	9.4	28.9	51.5	66.6	71.0
95°	8.8	26.4	48.4	62.8	67.2
97.5°	8.2	23.9	45.2	59.7	64.1
100°	7.5	21.4	42.7	56.6	61.0
102.5°	6.9	19.5	39.6	53.4	57.2
105°	6.3	17.0	37.1	50.3	54.7
107.5°	5.7	14.5	34.6	47.1	51.5
110°	5.0	12.6	31.4	44.0	48.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.4	10.7	28.9	40.8	45.2
115°	4.4	8.8	25.8	37.7	42.1
117.5°	3.8	6.9	22.6	34.6	39.0
120°	3.1	5.0	20.1	31.4	35.8
122.5°	3.1	3.8	17.6	28.3	32.7
125°	2.5	2.5	15.1	24.5	28.9
127.5°	2.5	1.9	12.6	22.0	25.1
130°	1.9	1.3	10.7	19.5	22.6
132.5°	1.9	1.3	8.2	17.0	20.1
135°	1.3	1.3	5.7	14.5	17.0
137.5°	1.3	0.6	3.8	11.3	14.5
140°	0.6	0.6	1.3	8.8	11.3
142.5°	0.6	0.6	0.6	6.3	8.8
145°	0.6	0.0	0.0	3.8	5.7
147.5°	0.6	0.0	0.0	1.3	3.1
150°	0.0	0.0	0.0	0.0	0.6
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)