

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: P242841

Luminaire Tested: **S125DR-S610D830-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242841
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-S610D830-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2138.5 lumens
Efficiency: N/A
Efficacy: 113.7 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

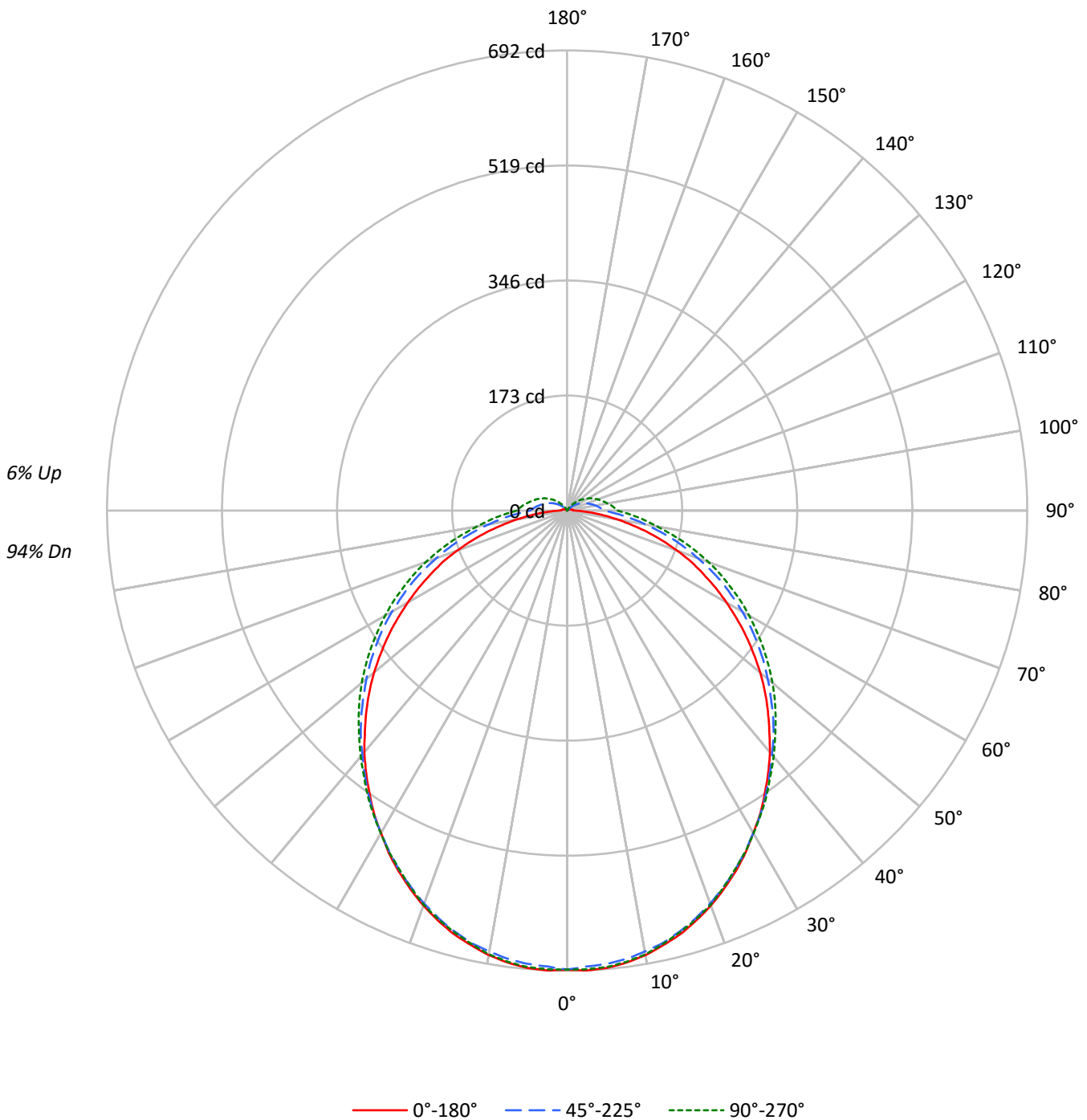
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4906	4906	4906
5°	4916	4812	4826
10°	4880	4722	4712
15°	4823	4615	4570
20°	4744	4484	4427
25°	4650	4345	4253
30°	4537	4192	4095
35°	4431	4051	3949
40°	4323	3903	3803
45°	4202	3775	3673
50°	4086	3636	3557
55°	3946	3505	3420
60°	3793	3355	3281
65°	3633	3197	3124
70°	3453	2984	2962
75°	3165	2778	2763
80°	2791	2526	2546
85°	2435	2342	2456



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	3.1
10°-20°	185.4	8.7
20°-30°	275.8	12.9
30°-40°	326.6	15.3
40°-50°	337.6	15.8
50°-60°	311.0	14.5
60°-70°	251.4	11.8
70°-80°	168.2	7.9
80°-90°	87.0	4.1
90°-100°	49.0	2.3
100°-110°	36.1	1.7
110°-120°	24.2	1.1
120°-130°	13.7	0.6
130°-140°	6.0	0.3
140°-150°	1.2	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	526.5	24.6
0°-40°	853.1	39.9
0°-60°	1501.7	70.2
0°-90°	2008.3	93.9
90°-120°	109.3	5.1
90°-150°	130.1	6.1
90°-180°	130.0	6.1
0°-180°	2138.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	690	690	690	690	690	
5°	690	689	684	690	689	66
15°	659	660	655	659	656	186
25°	599	601	597	600	596	276
35°	518	523	521	523	523	324
45°	427	434	438	443	443	330
55°	328	339	350	357	360	293
65°	226	242	258	268	271	224
75°	124	142	164	177	181	132
85°	37	60	83	98	104	39
90°	11	32	56	71	76	8
95°	9	26	49	64	69	7
105°	6	17	37	51	56	6
115°	4	9	26	39	43	4
125°	3	2	16	26	30	2
135°	1	1	5	14	18	1
145°	1	0	0	3	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°	690.3	690.3	690.3	690.3	690.3
2.5°	692.3	691.0	686.2	691.0	690.3
5°	690.3	689.0	684.2	689.6	689.0
7.5°	685.6	684.9	680.2	684.9	684.2
10°	678.8	678.8	673.4	678.1	677.4
12.5°	669.3	670.0	665.9	669.3	667.3
15°	659.2	659.9	655.1	659.2	656.5
17.5°	646.3	647.7	642.9	646.3	644.3
20°	632.1	633.5	628.7	630.7	630.7
22.5°	615.9	618.6	613.2	615.9	613.8
25°	598.9	601.0	596.9	599.6	596.2
27.5°	580.7	583.4	578.6	580.7	579.3
30°	559.7	563.7	559.7	561.0	560.4
32.5°	540.7	544.1	541.4	542.8	542.1
35°	518.4	523.1	521.1	523.1	523.1
37.5°	496.7	500.8	500.1	502.8	502.2
40°	474.4	479.8	479.2	481.9	483.2
42.5°	450.1	457.5	459.5	462.9	462.9
45°	427.0	434.5	437.9	442.6	443.3
47.5°	403.4	410.1	415.5	422.3	423.7
50°	379.0	386.4	393.9	401.3	403.4
52.5°	353.3	362.7	372.2	380.3	381.7
55°	328.2	339.1	349.9	357.3	360.0
57.5°	302.5	315.4	327.6	335.7	337.7
60°	276.8	290.3	303.9	314.0	316.1
62.5°	251.8	265.3	280.2	291.7	294.4
65°	226.0	241.6	257.8	268.0	270.7
67.5°	202.4	217.2	233.5	245.7	249.1
70°	176.0	191.5	209.1	222.0	226.0
72.5°	150.2	166.5	186.1	200.3	203.0
75°	124.5	142.1	163.8	177.3	180.7
77.5°	99.5	119.8	140.1	155.0	157.7
80°	76.5	96.8	119.8	134.7	137.4
82.5°	55.5	77.2	100.8	115.1	120.5
85°	37.2	59.6	83.2	98.1	103.5
87.5°	23.7	45.3	68.4	83.9	88.7
90°	10.8	32.5	55.5	71.1	75.8
92.5°	9.5	29.1	52.8	67.7	72.4
95°	8.8	26.4	49.4	64.3	69.0
97.5°	8.1	24.4	46.7	60.9	65.6
100°	7.4	21.7	43.3	57.5	61.6
102.5°	6.8	19.6	40.6	54.1	58.2
105°	6.1	16.9	37.2	50.8	55.5
107.5°	5.4	14.9	34.5	48.1	52.1
110°	4.7	12.9	31.8	44.7	49.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.7	10.8	29.1	41.3	46.0
115°	4.1	8.8	26.4	38.6	42.6
117.5°	3.4	6.8	23.7	35.2	39.9
120°	3.4	5.4	21.0	32.5	36.5
122.5°	2.7	3.4	18.3	29.1	33.2
125°	2.7	2.0	15.6	26.4	29.8
127.5°	2.0	1.4	12.9	23.0	27.1
130°	2.0	1.4	10.8	20.3	23.7
132.5°	1.4	1.4	8.1	17.6	20.3
135°	1.4	0.7	5.4	14.2	17.6
137.5°	1.4	0.7	3.4	11.5	14.2
140°	0.7	0.7	1.4	8.8	11.5
142.5°	0.7	0.0	0.0	6.1	8.8
145°	0.7	0.0	0.0	3.4	6.1
147.5°	0.0	0.0	0.0	1.4	2.7
150°	0.0	0.0	0.0	0.0	0.7
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)