

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: P243710

Luminaire Tested: **S125DR-H610D840-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243710
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-H610D840-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2261.9 lumens
Efficiency: N/A
Efficacy: 131.5 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

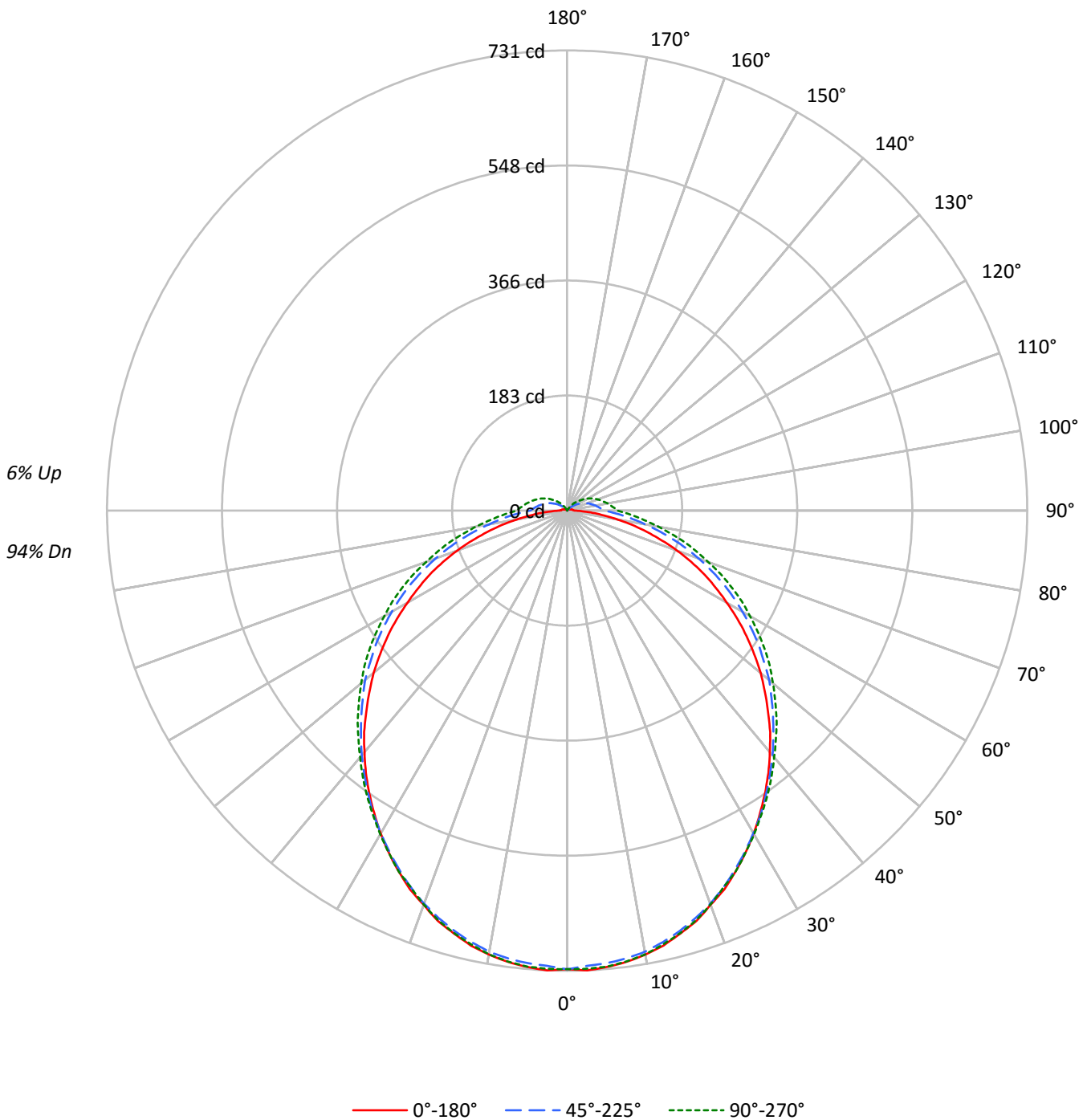
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5178	5178	5178
5°	5183	5075	5092
10°	5150	4990	4978
15°	5088	4871	4836
20°	5002	4740	4674
25°	4914	4587	4514
30°	4803	4432	4339
35°	4684	4281	4183
40°	4565	4134	4027
45°	4439	3987	3899
50°	4326	3866	3763
55°	4185	3716	3639
60°	4014	3553	3481
65°	3874	3382	3326
70°	3646	3171	3123
75°	3338	2923	2945
80°	2973	2654	2720
85°	2645	2483	2589



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.9	3.0
10°-20°	195.8	8.7
20°-30°	291.5	12.9
30°-40°	345.4	15.3
40°-50°	357.3	15.8
50°-60°	329.6	14.6
60°-70°	266.4	11.8
70°-80°	178.0	7.9
80°-90°	91.8	4.1
90°-100°	51.5	2.3
100°-110°	38.2	1.7
110°-120°	25.4	1.1
120°-130°	14.2	0.6
130°-140°	6.4	0.3
140°-150°	1.4	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	556.3	24.6
0°-40°	901.7	39.9
0°-60°	1588.6	70.2
0°-90°	2124.8	93.9
90°-120°	115.1	5.1
90°-150°	137.1	6.1
90°-180°	137.0	6.1
0°-180°	2261.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	728	728	728	728	728	
5°	728	727	722	727	727	69
15°	696	698	691	696	695	196
25°	633	636	630	634	633	291
35°	548	552	551	553	554	343
45°	451	458	462	470	471	349
55°	348	359	371	380	383	311
65°	241	255	273	285	288	238
75°	131	151	172	187	193	139
85°	40	63	88	104	109	42
90°	11	34	59	75	80	8
95°	9	28	52	67	72	7
105°	7	18	40	54	59	7
115°	5	9	28	40	45	4
125°	3	3	16	26	31	3
135°	1	1	6	16	18	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°	728.5	728.5	728.5	728.5	728.5
2.5°	731.2	729.1	723.8	729.1	728.5
5°	727.8	727.1	721.7	727.1	727.1
7.5°	723.1	722.4	717.7	723.1	722.4
10°	716.3	716.3	711.6	715.7	715.7
12.5°	707.6	707.6	702.2	706.9	705.6
15°	695.5	697.5	691.4	695.5	694.8
17.5°	683.4	683.4	678.6	682.0	682.0
20°	666.5	669.2	664.5	667.9	665.9
22.5°	651.7	653.1	648.3	651.7	648.3
25°	632.9	635.6	630.2	633.5	632.9
27.5°	613.3	615.4	611.3	615.4	613.3
30°	592.5	594.5	591.8	594.5	593.8
32.5°	570.2	574.3	572.3	574.3	573.6
35°	548.0	552.1	550.7	553.4	554.1
37.5°	525.1	529.2	529.2	532.5	533.2
40°	500.9	506.3	507.6	512.3	511.7
42.5°	477.3	482.7	484.7	490.8	490.8
45°	451.1	458.5	462.5	469.9	470.6
47.5°	426.2	434.3	440.3	447.0	448.4
50°	401.3	408.7	418.8	425.5	426.8
52.5°	374.3	383.8	393.9	403.3	406.0
55°	348.1	358.8	371.0	379.7	383.1
57.5°	321.1	332.6	346.1	356.8	359.5
60°	292.9	306.3	321.8	332.6	335.3
62.5°	266.6	281.4	297.6	309.0	313.1
65°	241.0	255.2	272.7	284.8	288.2
67.5°	213.4	228.9	247.1	260.6	263.9
70°	185.8	202.7	222.2	235.0	238.3
72.5°	157.5	176.4	197.3	211.4	215.4
75°	131.3	150.8	172.4	187.2	192.6
77.5°	106.4	126.6	148.1	163.6	168.3
80°	81.5	102.3	125.9	142.1	146.8
82.5°	59.2	81.5	105.7	121.9	126.6
85°	40.4	63.3	88.2	103.7	109.1
87.5°	24.9	47.1	72.7	88.2	93.6
90°	11.4	33.7	58.6	74.7	80.1
92.5°	10.1	31.0	55.2	71.4	76.1
95°	9.4	28.3	51.8	67.3	72.0
97.5°	8.8	25.6	48.5	64.0	68.7
100°	8.1	22.9	45.8	60.6	65.3
102.5°	7.4	20.9	42.4	57.2	61.3
105°	6.7	18.2	39.7	53.9	58.6
107.5°	6.1	15.5	37.0	50.5	55.2
110°	5.4	13.5	33.7	47.1	51.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.7	11.4	31.0	43.8	48.5
115°	4.7	9.4	27.6	40.4	45.1
117.5°	4.0	7.4	24.2	37.0	41.7
120°	3.4	5.4	21.5	33.7	38.4
122.5°	3.4	4.0	18.9	30.3	35.0
125°	2.7	2.7	16.2	26.3	31.0
127.5°	2.7	2.0	13.5	23.6	26.9
130°	2.0	1.3	11.4	20.9	24.2
132.5°	2.0	1.3	8.8	18.2	21.5
135°	1.3	1.3	6.1	15.5	18.2
137.5°	1.3	0.7	4.0	12.1	15.5
140°	0.7	0.7	1.3	9.4	12.1
142.5°	0.7	0.7	0.7	6.7	9.4
145°	0.7	0.0	0.0	4.0	6.1
147.5°	0.7	0.0	0.0	1.3	3.4
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)