

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: P243706

Luminaire Tested: **S125DR-H610D835-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243706
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-H610D835-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2239.7 lumens
Efficiency: N/A
Efficacy: 130.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

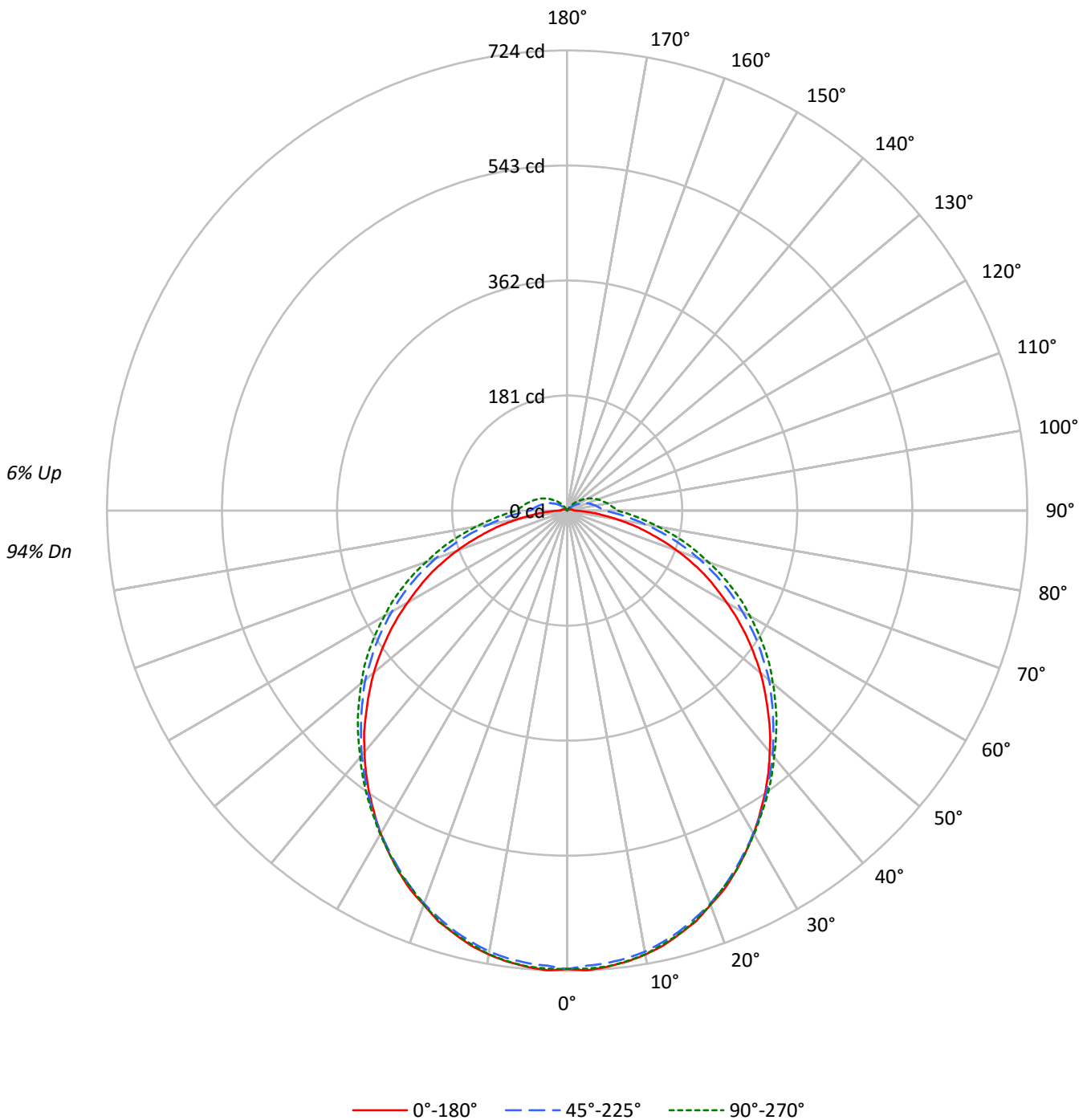
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5127	5127	5127
5°	5132	5026	5043
10°	5100	4941	4929
15°	5038	4824	4789
20°	4953	4693	4627
25°	4866	4542	4470
30°	4756	4389	4297
35°	4639	4239	4142
40°	4520	4094	3988
45°	4395	3948	3861
50°	4283	3828	3727
55°	4144	3679	3603
60°	3974	3519	3447
65°	3837	3349	3293
70°	3610	3140	3093
75°	3305	2895	2916
80°	2944	2629	2692
85°	2618	2457	2562



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.3	3.0
10°-20°	193.9	8.7
20°-30°	288.7	12.9
30°-40°	342.0	15.3
40°-50°	353.9	15.8
50°-60°	326.4	14.6
60°-70°	263.8	11.8
70°-80°	176.2	7.9
80°-90°	90.9	4.1
90°-100°	51.0	2.3
100°-110°	37.8	1.7
110°-120°	25.2	1.1
120°-130°	14.1	0.6
130°-140°	6.3	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°	550.8	24.6
0°-40°	892.9	39.9
0°-60°	1573.1	70.2
0°-90°	2104.0	93.9
90°-120°	114.0	5.1
90°-150°	135.7	6.1
90°-180°	136.0	6.1
0°-180°	2239.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	721	721	721	721	721	
5°	721	720	715	720	720	68
15°	689	691	685	689	688	194
25°	627	629	624	627	627	289
35°	543	547	545	548	549	339
45°	447	454	458	465	466	345
55°	345	355	367	376	379	308
65°	239	253	270	282	285	235
75°	130	149	171	185	191	138
85°	40	63	87	103	108	41
90°	11	33	58	74	79	8
95°	9	28	51	67	71	7
105°	7	18	39	53	58	7
115°	5	9	27	40	45	4
125°	3	3	16	26	31	3
135°	1	1	6	15	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°	721.3	721.3	721.3	721.3	721.3
2.5°	724.0	722.0	716.7	722.0	721.3
5°	720.7	720.0	714.7	720.0	720.0
7.5°	716.0	715.3	710.7	716.0	715.3
10°	709.3	709.3	704.7	708.7	708.7
12.5°	700.7	700.7	695.3	700.0	698.7
15°	688.7	690.7	684.7	688.7	688.0
17.5°	676.7	676.7	672.0	675.3	675.3
20°	660.0	662.7	658.0	661.3	659.3
22.5°	645.3	646.7	642.0	645.3	642.0
25°	626.7	629.3	624.0	627.3	626.7
27.5°	607.3	609.3	605.3	609.3	607.3
30°	586.7	588.7	586.0	588.7	588.0
32.5°	564.7	568.7	566.7	568.7	568.0
35°	542.7	546.7	545.3	548.0	548.7
37.5°	520.0	524.0	524.0	527.3	528.0
40°	496.0	501.3	502.7	507.3	506.7
42.5°	472.7	478.0	480.0	486.0	486.0
45°	446.7	454.0	458.0	465.3	466.0
47.5°	422.0	430.0	436.0	442.7	444.0
50°	397.3	404.7	414.7	421.3	422.7
52.5°	370.7	380.0	390.0	399.3	402.0
55°	344.7	355.3	367.3	376.0	379.3
57.5°	318.0	329.3	342.7	353.3	356.0
60°	290.0	303.3	318.7	329.3	332.0
62.5°	264.0	278.7	294.7	306.0	310.0
65°	238.7	252.7	270.0	282.0	285.3
67.5°	211.3	226.7	244.7	258.0	261.3
70°	184.0	200.7	220.0	232.7	236.0
72.5°	156.0	174.7	195.3	209.3	213.3
75°	130.0	149.3	170.7	185.3	190.7
77.5°	105.3	125.3	146.7	162.0	166.7
80°	80.7	101.3	124.7	140.7	145.3
82.5°	58.7	80.7	104.7	120.7	125.3
85°	40.0	62.7	87.3	102.7	108.0
87.5°	24.7	46.7	72.0	87.3	92.7
90°	11.3	33.3	58.0	74.0	79.3
92.5°	10.0	30.7	54.7	70.7	75.3
95°	9.3	28.0	51.3	66.7	71.3
97.5°	8.7	25.3	48.0	63.3	68.0
100°	8.0	22.7	45.3	60.0	64.7
102.5°	7.3	20.7	42.0	56.7	60.7
105°	6.7	18.0	39.3	53.3	58.0
107.5°	6.0	15.3	36.7	50.0	54.7
110°	5.3	13.3	33.3	46.7	51.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.7	11.3	30.7	43.3	48.0
115°	4.7	9.3	27.3	40.0	44.7
117.5°	4.0	7.3	24.0	36.7	41.3
120°	3.3	5.3	21.3	33.3	38.0
122.5°	3.3	4.0	18.7	30.0	34.7
125°	2.7	2.7	16.0	26.0	30.7
127.5°	2.7	2.0	13.3	23.3	26.7
130°	2.0	1.3	11.3	20.7	24.0
132.5°	2.0	1.3	8.7	18.0	21.3
135°	1.3	1.3	6.0	15.3	18.0
137.5°	1.3	0.7	4.0	12.0	15.3
140°	0.7	0.7	1.3	9.3	12.0
142.5°	0.7	0.7	0.7	6.7	9.3
145°	0.7	0.0	0.0	4.0	6.0
147.5°	0.7	0.0	0.0	1.3	3.3
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)