

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: P242860

Luminaire Tested: **S125DR-S610D935-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242860
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-S610D935-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1953.4 lumens
Efficiency: N/A
Efficacy: 103.9 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

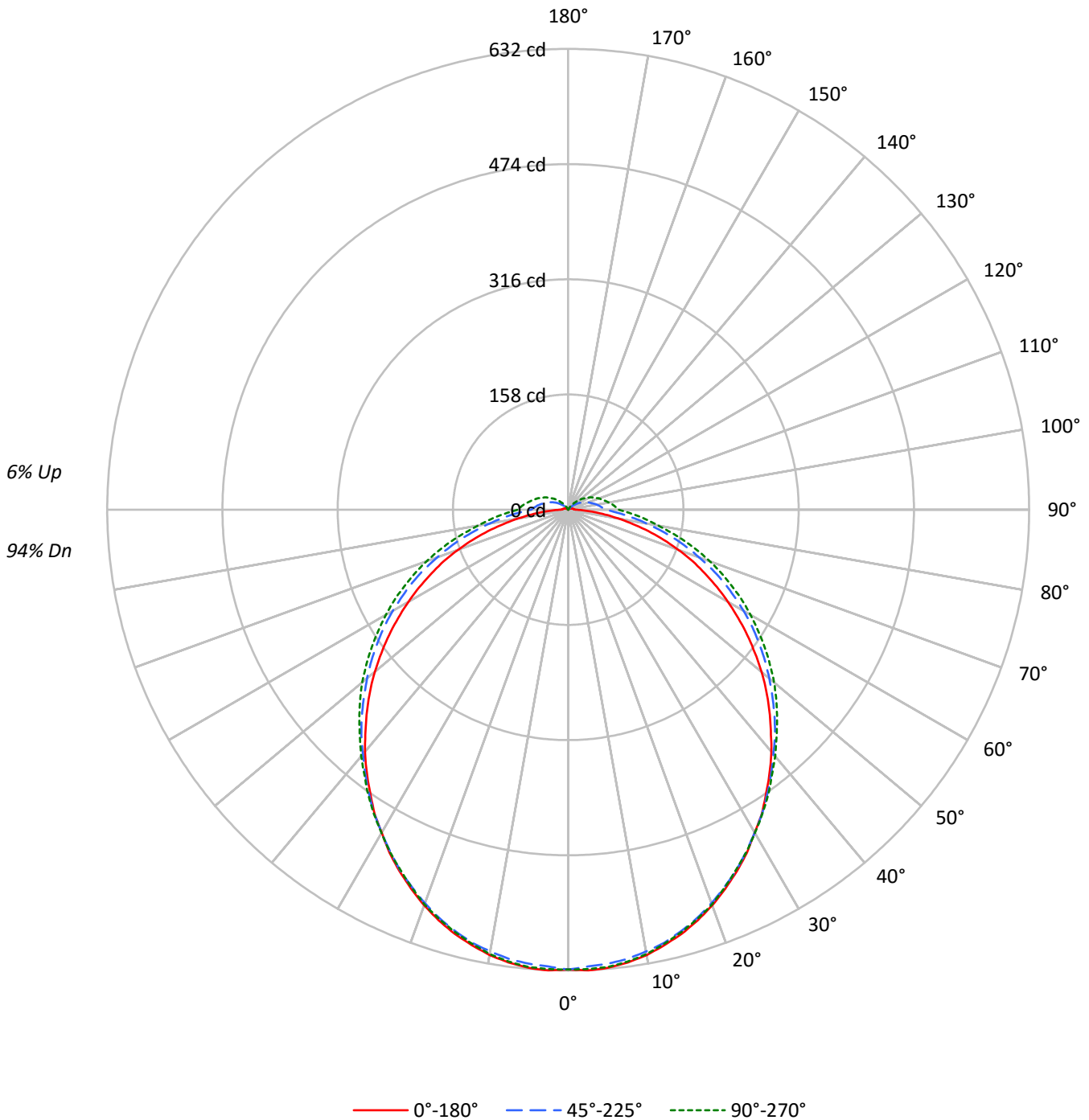
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4482	4482	4482
5°	4491	4395	4408
10°	4458	4313	4304
15°	4405	4216	4174
20°	4333	4096	4044
25°	4248	3969	3885
30°	4145	3829	3741
35°	4048	3700	3608
40°	3950	3565	3474
45°	3838	3448	3355
50°	3732	3321	3249
55°	3604	3201	3124
60°	3466	3065	2997
65°	3320	2921	2854
70°	3153	2726	2706
75°	2893	2537	2525
80°	2550	2307	2325
85°	2226	2139	2245



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	3.1
10°-20°	169.4	8.7
20°-30°	251.9	12.9
30°-40°	298.3	15.3
40°-50°	308.4	15.8
50°-60°	284.1	14.5
60°-70°	229.7	11.8
70°-80°	153.7	7.9
80°-90°	79.4	4.1
90°-100°	44.7	2.3
100°-110°	33.0	1.7
110°-120°	22.1	1.1
120°-130°	12.5	0.6
130°-140°	5.5	0.3
140°-150°	1.1	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	481.0	24.6
0°-40°	779.3	39.9
0°-60°	1371.8	70.2
0°-90°	1834.6	93.9
90°-120°	99.8	5.1
90°-150°	118.8	6.1
90°-180°	119.0	6.1
0°-180°	1953.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	631	631	631	631	631	
5°	631	629	625	630	629	60
15°	602	603	598	602	600	170
25°	547	549	545	548	545	252
35°	474	478	476	478	478	296
45°	390	397	400	404	405	301
55°	300	310	320	326	329	268
65°	206	221	236	245	247	205
75°	114	130	150	162	165	121
85°	34	54	76	90	95	35
90°	10	30	51	65	69	7
95°	8	24	45	59	63	6
105°	6	16	34	46	51	6
115°	4	8	24	35	39	4
125°	2	2	14	24	27	2
135°	1	1	5	13	16	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°	630.6	630.6	630.6	630.6	630.6
2.5°	632.4	631.2	626.9	631.2	630.6
5°	630.6	629.3	625.0	630.0	629.3
7.5°	626.3	625.6	621.3	625.6	625.0
10°	620.1	620.1	615.1	619.5	618.8
12.5°	611.4	612.0	608.3	611.4	609.6
15°	602.1	602.8	598.4	602.1	599.7
17.5°	590.4	591.6	587.3	590.4	588.5
20°	577.4	578.7	574.3	576.2	576.2
22.5°	562.6	565.1	560.1	562.6	560.7
25°	547.1	549.0	545.3	547.7	544.7
27.5°	530.4	532.9	528.6	530.4	529.2
30°	511.3	515.0	511.3	512.5	511.9
32.5°	494.0	497.0	494.6	495.8	495.2
35°	473.6	477.9	476.0	477.9	477.9
37.5°	453.8	457.5	456.9	459.3	458.7
40°	433.4	438.3	437.7	440.2	441.4
42.5°	411.1	417.9	419.8	422.9	422.9
45°	390.1	396.9	400.0	404.3	404.9
47.5°	368.5	374.6	379.6	385.8	387.0
50°	346.2	353.0	359.8	366.6	368.5
52.5°	322.7	331.4	340.0	347.4	348.7
55°	299.8	309.7	319.6	326.4	328.9
57.5°	276.3	288.1	299.2	306.6	308.5
60°	252.9	265.2	277.6	286.9	288.7
62.5°	230.0	242.3	255.9	266.5	268.9
65°	206.5	220.7	235.5	244.8	247.3
67.5°	184.8	198.4	213.3	224.4	227.5
70°	160.7	175.0	191.0	202.8	206.5
72.5°	137.2	152.1	170.0	183.0	185.5
75°	113.8	129.8	149.6	162.0	165.1
77.5°	90.9	109.4	128.0	141.6	144.0
80°	69.9	88.4	109.4	123.0	125.5
82.5°	50.7	70.5	92.1	105.1	110.0
85°	34.0	54.4	76.0	89.6	94.6
87.5°	21.6	41.4	62.4	76.7	81.0
90°	9.9	29.7	50.7	64.9	69.2
92.5°	8.7	26.6	48.2	61.8	66.1
95°	8.0	24.1	45.1	58.7	63.1
97.5°	7.4	22.3	42.7	55.6	60.0
100°	6.8	19.8	39.6	52.5	56.3
102.5°	6.2	17.9	37.1	49.5	53.2
105°	5.6	15.5	34.0	46.4	50.7
107.5°	4.9	13.6	31.5	43.9	47.6
110°	4.3	11.7	29.1	40.8	45.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.3	9.9	26.6	37.7	42.0
115°	3.7	8.0	24.1	35.2	38.9
117.5°	3.1	6.2	21.6	32.1	36.5
120°	3.1	4.9	19.2	29.7	33.4
122.5°	2.5	3.1	16.7	26.6	30.3
125°	2.5	1.9	14.2	24.1	27.2
127.5°	1.9	1.2	11.7	21.0	24.7
130°	1.9	1.2	9.9	18.5	21.6
132.5°	1.2	1.2	7.4	16.1	18.5
135°	1.2	0.6	4.9	13.0	16.1
137.5°	1.2	0.6	3.1	10.5	13.0
140°	0.6	0.6	1.2	8.0	10.5
142.5°	0.6	0.0	0.0	5.6	8.0
145°	0.6	0.0	0.0	3.1	5.6
147.5°	0.0	0.0	0.0	1.2	2.5
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)