

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: P242865

Luminaire Tested: **S125DR-S610D940-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242865
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-S610D940-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2023.1 lumens
Efficiency: N/A
Efficacy: 107.6 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

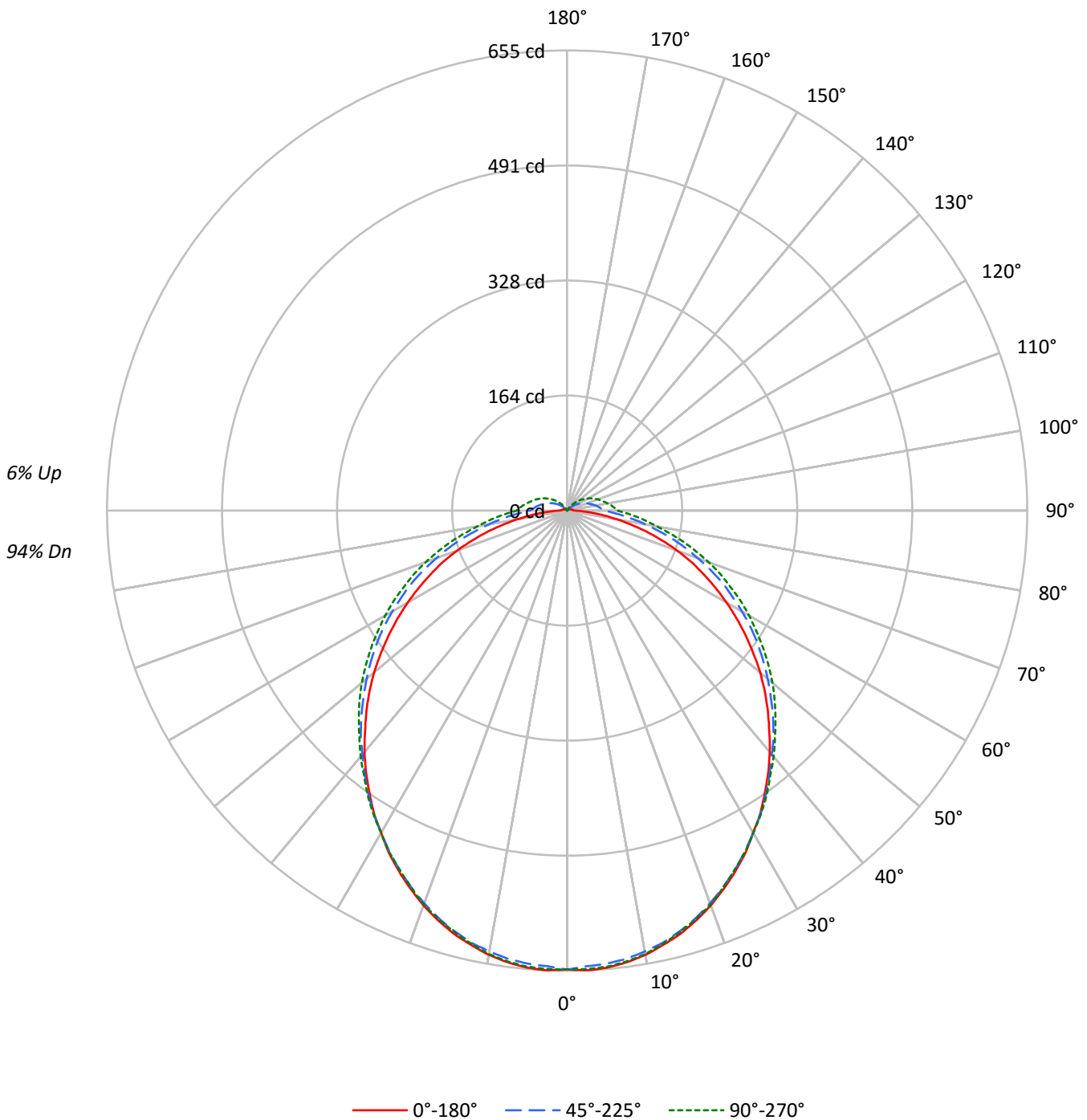
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4642	4642	4642
5°	4651	4552	4565
10°	4617	4467	4458
15°	4562	4366	4323
20°	4488	4242	4188
25°	4399	4110	4024
30°	4292	3966	3874
35°	4192	3832	3736
40°	4090	3692	3598
45°	3975	3571	3475
50°	3866	3440	3364
55°	3733	3316	3235
60°	3589	3174	3104
65°	3439	3025	2956
70°	3267	2823	2803
75°	2995	2627	2615
80°	2641	2389	2409
85°	2304	2218	2325



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.8	3.1
10°-20°	175.4	8.7
20°-30°	260.9	12.9
30°-40°	309.0	15.3
40°-50°	319.4	15.8
50°-60°	294.2	14.5
60°-70°	237.9	11.8
70°-80°	159.2	7.9
80°-90°	82.3	4.1
90°-100°	46.3	2.3
100°-110°	34.2	1.7
110°-120°	22.9	1.1
120°-130°	12.9	0.6
130°-140°	5.7	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°	498.1	24.6
0°-40°	807.1	39.9
0°-60°	1420.7	70.2
0°-90°	1900.0	93.9
90°-120°	103.4	5.1
90°-150°	123.1	6.1
90°-180°	123.0	6.1
0°-180°	2023.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	653	653	653	653	653	
5°	653	652	647	652	652	62
15°	624	624	620	624	621	176
25°	567	569	565	567	564	261
35°	490	495	493	495	495	307
45°	404	411	414	419	419	312
55°	310	321	331	338	341	278
65°	214	229	244	254	256	212
75°	118	134	155	168	171	125
85°	35	56	79	93	98	37
90°	10	31	52	67	72	7
95°	8	25	47	61	65	7
105°	6	16	35	48	52	6
115°	4	8	25	36	40	4
125°	3	2	15	25	28	2
135°	1	1	5	13	17	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°	653.1	653.1	653.1	653.1	653.1
2.5°	655.0	653.7	649.2	653.7	653.1
5°	653.1	651.8	647.3	652.4	651.8
7.5°	648.6	648.0	643.5	648.0	647.3
10°	642.2	642.2	637.1	641.6	640.9
12.5°	633.2	633.9	630.0	633.2	631.3
15°	623.6	624.3	619.8	623.6	621.1
17.5°	611.5	612.7	608.3	611.5	609.5
20°	598.0	599.3	594.8	596.7	596.7
22.5°	582.6	585.2	580.1	582.6	580.7
25°	566.6	568.6	564.7	567.3	564.1
27.5°	549.4	551.9	547.4	549.4	548.1
30°	529.5	533.3	529.5	530.8	530.1
32.5°	511.6	514.8	512.2	513.5	512.9
35°	490.4	494.9	493.0	494.9	494.9
37.5°	470.0	473.8	473.2	475.7	475.1
40°	448.8	454.0	453.3	455.9	457.2
42.5°	425.8	432.8	434.7	437.9	437.9
45°	404.0	411.1	414.3	418.7	419.4
47.5°	381.6	388.0	393.1	399.5	400.8
50°	358.6	365.6	372.6	379.7	381.6
52.5°	334.2	343.2	352.1	359.8	361.1
55°	310.5	320.8	331.0	338.1	340.6
57.5°	286.2	298.4	309.9	317.6	319.5
60°	261.9	274.7	287.5	297.1	299.0
62.5°	238.2	251.0	265.1	276.0	278.5
65°	213.9	228.6	243.9	253.5	256.1
67.5°	191.4	205.5	220.9	232.4	235.6
70°	166.5	181.2	197.8	210.0	213.9
72.5°	142.1	157.5	176.1	189.5	192.1
75°	117.8	134.5	154.9	167.8	171.0
77.5°	94.1	113.3	132.5	146.6	149.2
80°	72.4	91.6	113.3	127.4	130.0
82.5°	52.5	73.0	95.4	108.8	114.0
85°	35.2	56.3	78.8	92.8	98.0
87.5°	22.4	42.9	64.7	79.4	83.9
90°	10.2	30.7	52.5	67.2	71.7
92.5°	9.0	27.5	49.9	64.0	68.5
95°	8.3	25.0	46.7	60.8	65.3
97.5°	7.7	23.0	44.2	57.6	62.1
100°	7.0	20.5	41.0	54.4	58.3
102.5°	6.4	18.6	38.4	51.2	55.1
105°	5.8	16.0	35.2	48.0	52.5
107.5°	5.1	14.1	32.7	45.5	49.3
110°	4.5	12.2	30.1	42.3	46.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.5	10.2	27.5	39.1	43.5
115°	3.8	8.3	25.0	36.5	40.3
117.5°	3.2	6.4	22.4	33.3	37.8
120°	3.2	5.1	19.8	30.7	34.6
122.5°	2.6	3.2	17.3	27.5	31.4
125°	2.6	1.9	14.7	25.0	28.2
127.5°	1.9	1.3	12.2	21.8	25.6
130°	1.9	1.3	10.2	19.2	22.4
132.5°	1.3	1.3	7.7	16.6	19.2
135°	1.3	0.6	5.1	13.4	16.6
137.5°	1.3	0.6	3.2	10.9	13.4
140°	0.6	0.6	1.3	8.3	10.9
142.5°	0.6	0.0	0.0	5.8	8.3
145°	0.6	0.0	0.0	3.2	5.8
147.5°	0.0	0.0	0.0	1.3	2.6
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)