

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: P242846

Luminaire Tested: **S125DR-S610D835-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242846
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-S610D835-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2268.8 lumens
Efficiency: N/A
Efficacy: 120.7 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

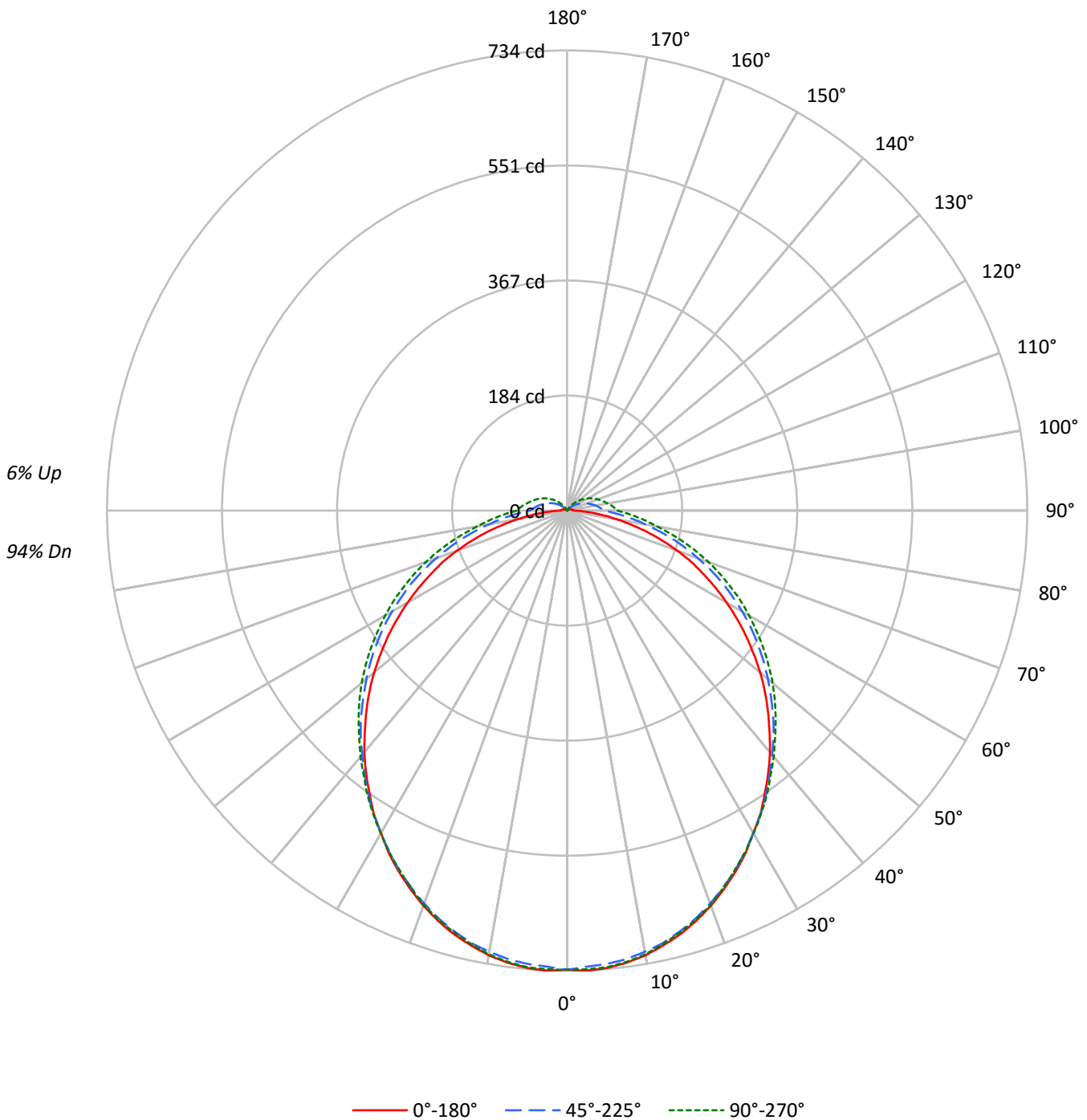
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5205	5205	5205
5°	5215	5105	5120
10°	5178	5009	4999
15°	5117	4896	4848
20°	5033	4757	4697
25°	4934	4610	4512
30°	4813	4447	4344
35°	4701	4298	4190
40°	4587	4140	4035
45°	4458	4005	3896
50°	4335	3858	3773
55°	4186	3718	3629
60°	4025	3560	3481
65°	3855	3393	3314
70°	3663	3167	3142
75°	3358	2947	2932
80°	2959	2680	2701
85°	2586	2486	2608



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.3	3.1
10°-20°	196.7	8.7
20°-30°	292.6	12.9
30°-40°	346.5	15.3
40°-50°	358.2	15.8
50°-60°	330.0	14.5
60°-70°	266.7	11.8
70°-80°	178.5	7.9
80°-90°	92.3	4.1
90°-100°	52.0	2.3
100°-110°	38.3	1.7
110°-120°	25.6	1.1
120°-130°	14.5	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°	558.6	24.6
0°-40°	905.1	39.9
0°-60°	1593.2	70.2
0°-90°	2130.7	93.9
90°-120°	115.9	5.1
90°-150°	138.0	6.1
90°-180°	138.0	6.1
0°-180°	2268.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	732	732	732	732	732	
5°	732	731	726	732	731	70
15°	699	700	695	699	696	197
25°	636	638	633	636	633	293
35°	550	555	553	555	555	344
45°	453	461	465	470	470	350
55°	348	360	371	379	382	311
65°	240	256	274	284	287	238
75°	132	151	174	188	192	140
85°	40	63	88	104	110	41
90°	12	34	59	75	80	8
95°	9	28	52	68	73	7
105°	6	18	40	54	59	7
115°	4	9	28	41	45	4
125°	3	2	16	28	32	2
135°	1	1	6	15	19	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°	732.4	732.4	732.4	732.4	732.4
2.5°	734.5	733.1	728.1	733.1	732.4
5°	732.4	731.0	725.9	731.7	731.0
7.5°	727.4	726.6	721.6	726.6	725.9
10°	720.2	720.2	714.4	719.5	718.7
12.5°	710.1	710.8	706.5	710.1	708.0
15°	699.4	700.1	695.0	699.4	696.5
17.5°	685.7	687.2	682.1	685.7	683.6
20°	670.6	672.1	667.0	669.2	669.2
22.5°	653.4	656.3	650.5	653.4	651.2
25°	635.5	637.6	633.3	636.2	632.6
27.5°	616.1	618.9	613.9	616.1	614.6
30°	593.8	598.1	593.8	595.2	594.5
32.5°	573.7	577.3	574.4	575.9	575.1
35°	550.0	555.0	552.9	555.0	555.0
37.5°	527.0	531.3	530.6	533.5	532.8
40°	503.3	509.1	508.4	511.2	512.7
42.5°	477.5	485.4	487.5	491.1	491.1
45°	453.1	461.0	464.6	469.6	470.3
47.5°	427.9	435.1	440.9	448.0	449.5
50°	402.1	410.0	417.9	425.8	427.9
52.5°	374.8	384.9	394.9	403.5	405.0
55°	348.2	359.7	371.2	379.1	382.0
57.5°	321.0	334.6	347.5	356.1	358.3
60°	293.7	308.0	322.4	333.2	335.3
62.5°	267.1	281.5	297.3	309.5	312.3
65°	239.8	256.3	273.6	284.3	287.2
67.5°	214.7	230.5	247.7	260.6	264.2
70°	186.7	203.2	221.9	235.5	239.8
72.5°	159.4	176.6	197.5	212.5	215.4
75°	132.1	150.8	173.8	188.1	191.7
77.5°	105.5	127.1	148.6	164.4	167.3
80°	81.1	102.7	127.1	142.9	145.8
82.5°	58.9	81.9	107.0	122.1	127.8
85°	39.5	63.2	88.3	104.1	109.9
87.5°	25.1	48.1	72.5	89.0	94.1
90°	11.5	34.5	58.9	75.4	80.4
92.5°	10.1	30.9	56.0	71.8	76.8
95°	9.3	28.0	52.4	68.2	73.2
97.5°	8.6	25.8	49.5	64.6	69.6
100°	7.9	23.0	46.0	61.0	65.3
102.5°	7.2	20.8	43.1	57.4	61.8
105°	6.5	18.0	39.5	53.9	58.9
107.5°	5.7	15.8	36.6	51.0	55.3
110°	5.0	13.6	33.7	47.4	52.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.0	11.5	30.9	43.8	48.8
115°	4.3	9.3	28.0	40.9	45.2
117.5°	3.6	7.2	25.1	37.3	42.4
120°	3.6	5.7	22.3	34.5	38.8
122.5°	2.9	3.6	19.4	30.9	35.2
125°	2.9	2.2	16.5	28.0	31.6
127.5°	2.2	1.4	13.6	24.4	28.7
130°	2.2	1.4	11.5	21.5	25.1
132.5°	1.4	1.4	8.6	18.7	21.5
135°	1.4	0.7	5.7	15.1	18.7
137.5°	1.4	0.7	3.6	12.2	15.1
140°	0.7	0.7	1.4	9.3	12.2
142.5°	0.7	0.0	0.0	6.5	9.3
145°	0.7	0.0	0.0	3.6	6.5
147.5°	0.0	0.0	0.0	1.4	2.9
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)