

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: P243696

Luminaire Tested: **S125DR-H610D927-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243696
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-H610D927-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1774.3 lumens
Efficiency: N/A
Efficacy: 103.2 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

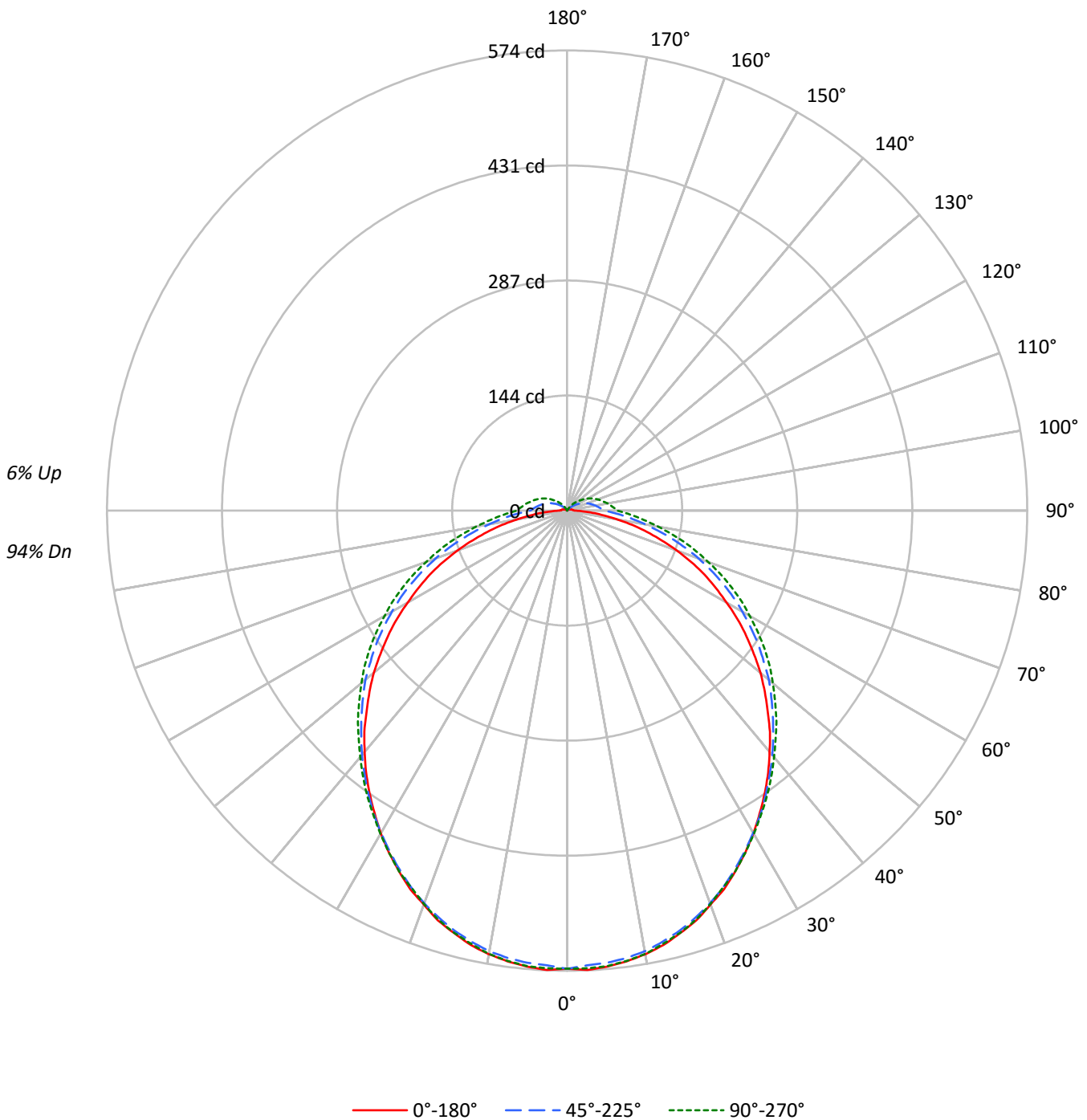
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4061	4061	4061
5°	4065	3982	3995
10°	4040	3914	3905
15°	3992	3821	3793
20°	3924	3718	3666
25°	3854	3598	3541
30°	3768	3476	3404
35°	3675	3358	3282
40°	3581	3243	3159
45°	3481	3128	3059
50°	3394	3032	2952
55°	3282	2915	2854
60°	3148	2787	2730
65°	3040	2653	2608
70°	2861	2488	2450
75°	2618	2293	2309
80°	2331	2083	2132
85°	2075	1948	2031



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.1	3.0
10°-20°	153.6	8.7
20°-30°	228.7	12.9
30°-40°	270.9	15.3
40°-50°	280.3	15.8
50°-60°	258.5	14.6
60°-70°	208.9	11.8
70°-80°	139.6	7.9
80°-90°	72.0	4.1
90°-100°	40.4	2.3
100°-110°	30.0	1.7
110°-120°	19.9	1.1
120°-130°	11.2	0.6
130°-140°	5.0	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°	436.4	24.6
0°-40°	707.3	39.9
0°-60°	1246.2	70.2
0°-90°	1666.7	93.9
90°-120°	90.3	5.1
90°-150°	107.6	6.1
90°-180°	108.0	6.1
0°-180°	1774.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	571	571	571	571	571	
5°	571	570	566	570	570	54
15°	546	547	542	546	545	154
25°	496	499	494	497	496	229
35°	430	433	432	434	435	269
45°	354	360	363	369	369	273
55°	273	282	291	298	300	244
65°	189	200	214	223	226	186
75°	103	118	135	147	151	109
85°	32	50	69	81	86	33
90°	9	26	46	59	63	6
95°	7	22	41	53	56	6
105°	5	14	31	42	46	6
115°	4	7	22	32	35	3
125°	2	2	13	21	24	2
135°	1	1	5	12	14	1
145°	0	0	0	3	5	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°	571.4	571.4	571.4	571.4	571.4
2.5°	573.6	572.0	567.7	572.0	571.4
5°	570.9	570.4	566.2	570.4	570.4
7.5°	567.2	566.7	563.0	567.2	566.7
10°	561.9	561.9	558.2	561.4	561.4
12.5°	555.1	555.1	550.8	554.5	553.5
15°	545.6	547.1	542.4	545.6	545.0
17.5°	536.1	536.1	532.4	535.0	535.0
20°	522.9	525.0	521.3	523.9	522.3
22.5°	511.2	512.3	508.6	511.2	508.6
25°	496.4	498.6	494.3	497.0	496.4
27.5°	481.1	482.7	479.5	482.7	481.1
30°	464.8	466.3	464.2	466.3	465.8
32.5°	447.3	450.5	448.9	450.5	450.0
35°	429.9	433.1	432.0	434.1	434.7
37.5°	411.9	415.1	415.1	417.8	418.3
40°	392.9	397.2	398.2	401.9	401.4
42.5°	374.4	378.7	380.3	385.0	385.0
45°	353.8	359.7	362.8	368.6	369.2
47.5°	334.3	340.6	345.4	350.7	351.7
50°	314.8	320.6	328.5	333.8	334.8
52.5°	293.6	301.0	309.0	316.4	318.5
55°	273.0	281.5	291.0	297.9	300.5
57.5°	251.9	260.9	271.5	279.9	282.0
60°	229.7	240.3	252.4	260.9	263.0
62.5°	209.1	220.8	233.4	242.4	245.6
65°	189.1	200.2	213.9	223.4	226.0
67.5°	167.4	179.6	193.8	204.4	207.0
70°	145.8	159.0	174.3	184.3	187.0
72.5°	123.6	138.4	154.7	165.8	169.0
75°	103.0	118.3	135.2	146.8	151.0
77.5°	83.4	99.3	116.2	128.3	132.0
80°	63.9	80.3	98.8	111.4	115.1
82.5°	46.5	63.9	82.9	95.6	99.3
85°	31.7	49.6	69.2	81.3	85.6
87.5°	19.5	37.0	57.0	69.2	73.4
90°	9.0	26.4	45.9	58.6	62.8
92.5°	7.9	24.3	43.3	56.0	59.7
95°	7.4	22.2	40.7	52.8	56.5
97.5°	6.9	20.1	38.0	50.2	53.9
100°	6.3	18.0	35.9	47.5	51.2
102.5°	5.8	16.4	33.3	44.9	48.1
105°	5.3	14.3	31.2	42.3	45.9
107.5°	4.8	12.1	29.0	39.6	43.3
110°	4.2	10.6	26.4	37.0	40.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.7	9.0	24.3	34.3	38.0
115°	3.7	7.4	21.7	31.7	35.4
117.5°	3.2	5.8	19.0	29.0	32.7
120°	2.6	4.2	16.9	26.4	30.1
122.5°	2.6	3.2	14.8	23.8	27.5
125°	2.1	2.1	12.7	20.6	24.3
127.5°	2.1	1.6	10.6	18.5	21.1
130°	1.6	1.1	9.0	16.4	19.0
132.5°	1.6	1.1	6.9	14.3	16.9
135°	1.1	1.1	4.8	12.1	14.3
137.5°	1.1	0.5	3.2	9.5	12.1
140°	0.5	0.5	1.1	7.4	9.5
142.5°	0.5	0.5	0.5	5.3	7.4
145°	0.5	0.0	0.0	3.2	4.8
147.5°	0.5	0.0	0.0	1.1	2.6
150°	0.0	0.0	0.0	0.0	0.5
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)