

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: P243183

Luminaire Tested: **S122DR-H1005D927-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243183
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-53)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DR-H1005D927-X4F0-XX-UDD-D-W
Description: DEFINE 2 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: 3070.0 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.15' x L: 3.88' x H: 0.08')
CIE Type: Semi-Direct

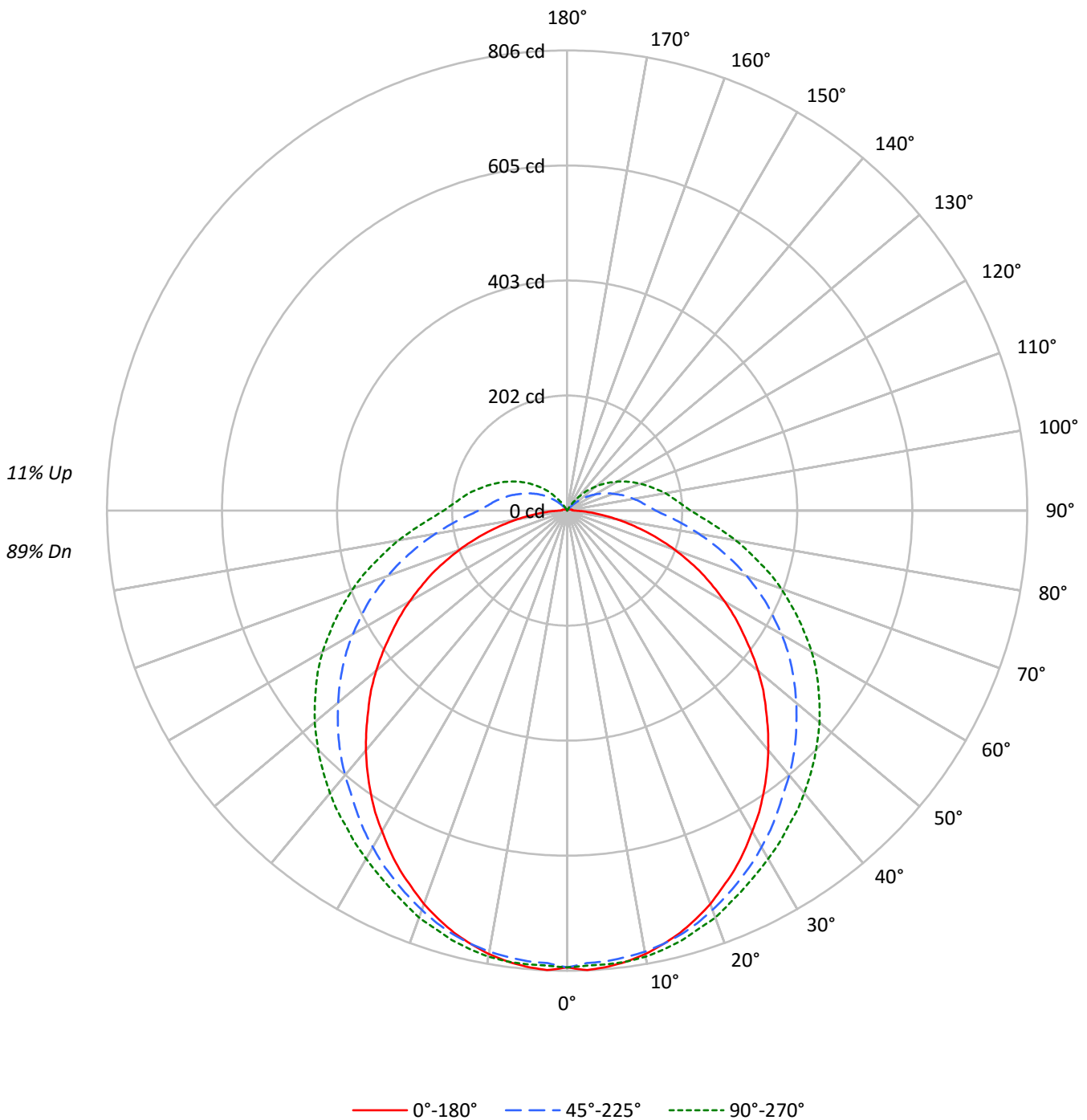
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243183

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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	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89
1	104	98	93	88	100	95	90	86	88	84	81	82	79	76	77	74	72	69
2	93	84	77	70	90	81	74	68	76	70	65	71	66	62	66	62	59	56
3	85	73	64	57	81	71	63	56	66	59	54	62	56	51	58	53	49	46
4	77	64	55	48	74	62	54	47	58	51	45	55	48	43	51	46	41	39
5	71	57	48	41	68	55	47	40	52	44	39	49	42	37	46	40	36	33
6	65	51	42	35	63	50	41	35	47	39	34	44	37	32	41	36	31	29
7	60	46	37	31	58	45	37	30	42	35	29	40	33	28	38	32	28	25
8	56	42	33	27	54	41	33	27	39	31	26	37	30	25	35	29	25	22
9	52	39	30	25	50	38	30	24	36	28	24	34	27	23	32	26	22	20
10	49	36	28	22	47	35	27	22	33	26	21	31	25	21	30	24	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15240	15240	15240
5°	15312	14613	14528
10°	15201	14129	13941
15°	15009	13631	13320
20°	14747	13091	12733
25°	14445	12557	12131
30°	14088	12056	11646
35°	13759	11559	11215
40°	13389	11130	10862
45°	12987	10745	10507
50°	12620	10348	10175
55°	12134	9977	9822
60°	11705	9567	9472
65°	11232	9149	9049
70°	10549	8652	8644
75°	9790	8121	8169
80°	8711	7599	7752
85°	7631	7188	7339



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.9	2.5
10°-20°	217.8	7.1
20°-30°	329.9	10.7
30°-40°	402.4	13.1
40°-50°	433.0	14.1
50°-60°	421.0	13.7
60°-70°	368.0	12.0
70°-80°	283.4	9.2
80°-90°	190.4	6.2
90°-100°	131.8	4.3
100°-110°	96.9	3.2
110°-120°	64.5	2.1
120°-130°	36.5	1.2
130°-140°	15.7	0.5
140°-150°	2.9	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	623.6	20.3
0°-40°	1026.0	33.4
0°-60°	1880.0	61.2
0°-90°	2721.8	88.7
90°-120°	293.2	9.5
90°-150°	348.3	11.3
90°-180°	348.0	11.3
0°-180°	3070.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	800	800	800	800	800	
5°	802	799	792	799	798	76
15°	766	769	769	779	779	216
25°	694	705	714	730	731	319
35°	601	621	643	668	675	376
45°	492	523	566	601	613	380
55°	377	421	480	524	537	338
65°	261	316	386	432	447	257
75°	144	210	283	333	348	152
85°	44	115	190	238	253	45
90°	12	80	155	202	216	8
95°	9	65	135	179	193	7
105°	7	40	102	143	155	7
115°	4	19	71	107	119	4
125°	3	2	42	72	84	3
135°	1	1	14	39	49	1
145°	1	0	0	9	13	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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CATALOG NUMBER: S122DR-H1005D927-X4F0-XX-UDD-D-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	800.1	800.1	800.1	800.1	800.1
2.5°	805.6	802.3	793.4	800.1	797.8
5°	802.3	799.0	792.3	799.0	797.8
7.5°	796.7	794.5	788.9	797.8	796.7
10°	788.9	787.8	784.5	793.4	793.4
12.5°	777.8	778.9	777.8	787.8	786.7
15°	765.5	768.9	768.9	778.9	778.9
17.5°	749.9	755.5	757.7	768.9	767.8
20°	733.2	739.9	744.4	756.6	758.8
22.5°	713.2	723.2	729.9	743.2	744.4
25°	694.2	705.4	714.3	729.9	731.0
27.5°	671.9	685.3	698.7	714.3	717.6
30°	648.5	665.2	680.8	699.8	704.2
32.5°	626.2	643.0	663.0	683.1	690.9
35°	600.6	620.7	643.0	667.5	675.3
37.5°	575.0	596.1	622.9	651.9	661.9
40°	548.2	572.7	605.1	636.3	646.3
42.5°	520.4	547.1	586.1	618.4	629.6
45°	492.5	522.6	566.1	600.6	612.9
47.5°	465.8	498.1	544.9	583.9	595.0
50°	436.8	472.5	523.7	563.8	577.2
52.5°	406.7	446.8	502.5	543.8	557.1
55°	376.6	421.2	480.3	523.7	537.1
57.5°	348.8	395.6	458.0	501.4	517.0
60°	318.7	368.8	433.5	479.1	494.7
62.5°	288.6	343.2	408.9	455.7	470.2
65°	260.7	316.5	385.5	432.3	446.8
67.5°	229.5	288.6	359.9	408.9	422.3
70°	200.6	263.0	334.3	383.3	398.9
72.5°	171.6	235.1	308.7	357.7	374.4
75°	143.7	209.5	283.0	333.2	347.7
77.5°	114.8	183.9	258.5	308.7	323.1
80°	89.1	158.2	234.0	284.1	299.7
82.5°	63.5	134.8	211.7	260.7	275.2
85°	43.5	114.8	190.5	238.5	252.9
87.5°	25.6	95.8	170.5	218.4	232.9
90°	12.3	80.2	154.9	201.7	216.2
92.5°	10.0	72.4	143.7	189.4	203.9
95°	8.9	64.6	134.8	179.4	192.8
97.5°	8.9	59.1	127.0	170.5	183.9
100°	7.8	52.4	118.1	160.5	174.9
102.5°	7.8	45.7	110.3	151.5	164.9
105°	6.7	40.1	102.5	142.6	154.9
107.5°	5.6	34.5	93.6	133.7	146.0
110°	5.6	29.0	85.8	124.8	137.1



TEST NUMBER: P243183

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.5	24.5	79.1	115.9	128.1
115°	4.5	18.9	71.3	107.0	119.2
117.5°	4.5	13.4	63.5	98.1	110.3
120°	3.3	8.9	56.8	90.3	101.4
122.5°	3.3	5.6	49.0	81.3	92.5
125°	3.3	2.2	42.3	72.4	83.6
127.5°	2.2	2.2	34.5	64.6	74.7
130°	2.2	1.1	27.9	55.7	65.7
132.5°	2.2	1.1	21.2	47.9	56.8
135°	1.1	1.1	14.5	39.0	49.0
137.5°	1.1	1.1	7.8	31.2	39.0
140°	1.1	0.0	3.3	23.4	30.1
142.5°	1.1	0.0	0.0	15.6	22.3
145°	1.1	0.0	0.0	8.9	13.4
147.5°	0.0	0.0	0.0	2.2	6.7
150°	0.0	0.0	0.0	0.0	1.1
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)