

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: P243207

Luminaire Tested: **S122DR-H1005D935-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243207
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-H1005D935-X4F0-XX-UDD-D-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3336.8 lumens
Efficiency: N/A
Efficacy: 88.5 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

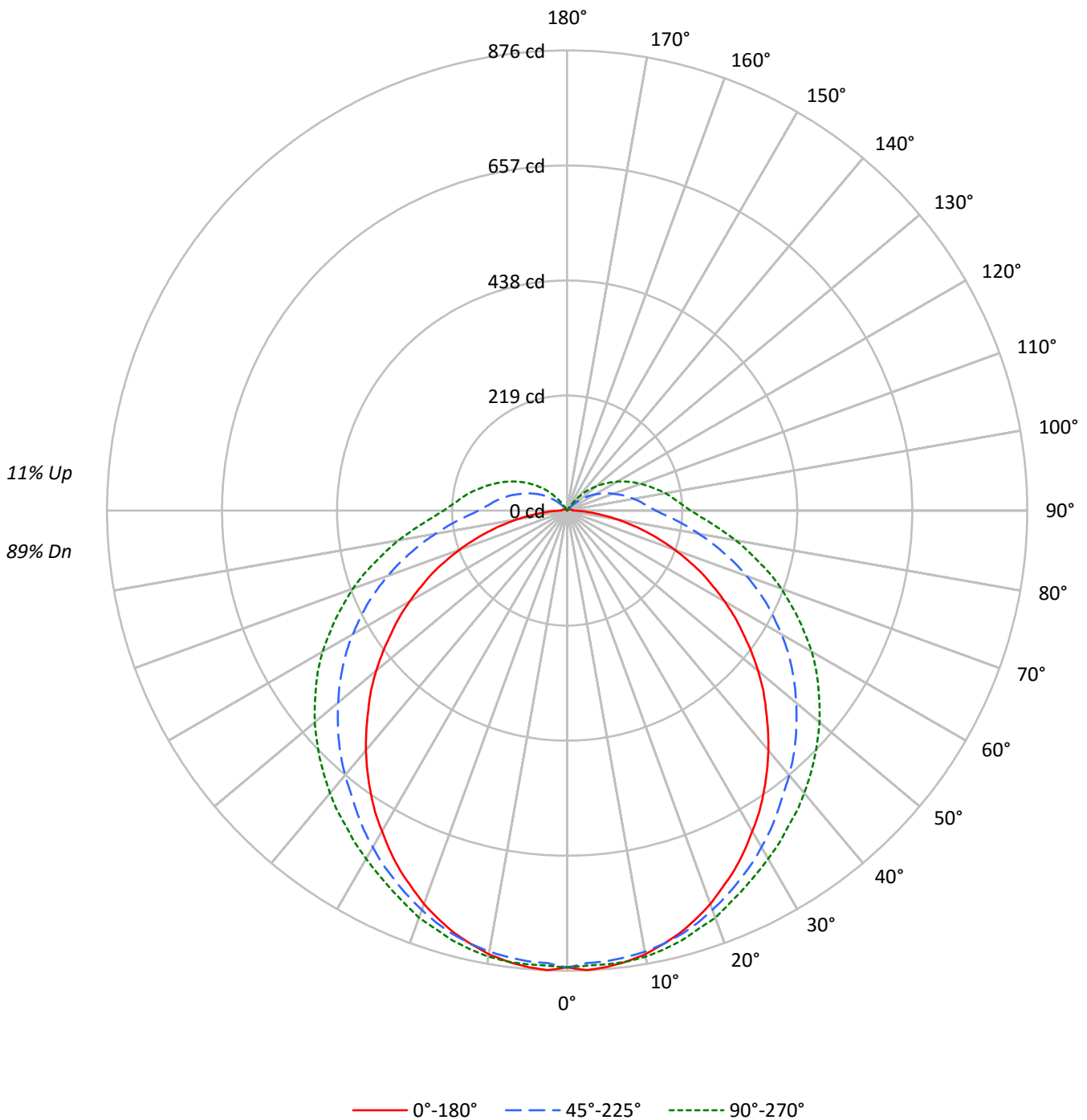
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243207

CATALOG NUMBER: S122DR-H1005D935-X4F0-XX-UDD-D-W

Luminous Intensity Polar Plot





TEST NUMBER: P243207

CATALOG NUMBER: S122DR-H1005D935-X4F0-XX-UDD-D-W

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°	16564	16564	16564
5°	16642	15882	15790
10°	16523	15355	15152
15°	16313	14815	14478
20°	16028	14228	13840
25°	15700	13647	13185
30°	15314	13104	12658
35°	14954	12562	12189
40°	14554	12096	11805
45°	14116	11677	11418
50°	13718	11247	11058
55°	13191	10843	10674
60°	12722	10397	10295
65°	12210	9944	9837
70°	11464	9402	9396
75°	10641	8827	8878
80°	9474	8258	8427
85°	8280	7814	7977



TEST NUMBER: P243207

CATALOG NUMBER: S122DR-H1005D935-X4F0-XX-UDD-D-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.5	2.5
10°-20°	236.7	7.1
20°-30°	358.6	10.7
30°-40°	437.3	13.1
40°-50°	470.6	14.1
50°-60°	457.6	13.7
60°-70°	400.0	12.0
70°-80°	308.0	9.2
80°-90°	206.9	6.2
90°-100°	143.2	4.3
100°-110°	105.3	3.2
110°-120°	70.1	2.1
120°-130°	39.7	1.2
130°-140°	17.1	0.5
140°-150°	3.1	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	677.7	20.3
0°-40°	1115.1	33.4
0°-60°	2043.3	61.2
0°-90°	2958.2	88.7
90°-120°	318.6	9.5
90°-150°	378.5	11.3
90°-180°	379.0	11.4
0°-180°	3336.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	870	870	870	870	870	
5°	872	868	861	868	867	83
15°	832	836	836	847	847	234
25°	754	767	776	793	794	347
35°	653	675	699	725	734	408
45°	535	568	615	653	666	414
55°	409	458	522	569	584	367
65°	283	344	419	470	486	279
75°	156	228	308	362	378	165
85°	47	125	207	259	275	49
90°	13	87	168	219	235	9
95°	10	70	146	195	210	8
105°	7	44	111	155	168	8
115°	5	21	78	116	130	5
125°	4	2	46	79	91	3
135°	1	1	16	42	53	1
145°	1	0	0	10	14	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



TEST NUMBER: P243207

CATALOG NUMBER: S122DR-H1005D935-X4F0-XX-UDD-D-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	869.6	869.6	869.6	869.6	869.6
2.5°	875.6	872.0	862.3	869.6	867.1
5°	872.0	868.4	861.1	868.4	867.1
7.5°	865.9	863.5	857.5	867.1	865.9
10°	857.5	856.2	852.6	862.3	862.3
12.5°	845.3	846.6	845.3	856.2	855.0
15°	832.0	835.7	835.7	846.6	846.6
17.5°	815.1	821.1	823.5	835.7	834.4
20°	796.9	804.2	809.0	822.3	824.8
22.5°	775.1	786.0	793.3	807.8	809.0
25°	754.5	766.6	776.3	793.3	794.5
27.5°	730.3	744.8	759.4	776.3	779.9
30°	704.9	723.0	740.0	760.6	765.4
32.5°	680.6	698.8	720.6	742.4	750.9
35°	652.8	674.6	698.8	725.4	733.9
37.5°	624.9	647.9	677.0	708.5	719.4
40°	595.9	622.5	657.6	691.5	702.4
42.5°	565.6	594.6	637.0	672.2	684.3
45°	535.3	568.0	615.2	652.8	666.1
47.5°	506.2	541.4	592.2	634.6	646.7
50°	474.8	513.5	569.2	612.8	627.3
52.5°	442.1	485.7	546.2	591.0	605.5
55°	409.4	457.8	522.0	569.2	583.7
57.5°	379.1	429.9	497.8	545.0	561.9
60°	346.4	400.9	471.1	520.8	537.7
62.5°	313.7	373.0	444.5	495.3	511.1
65°	283.4	344.0	419.0	469.9	485.7
67.5°	249.5	313.7	391.2	444.5	459.0
70°	218.0	285.8	363.3	416.6	433.6
72.5°	186.5	255.5	335.5	388.8	406.9
75°	156.2	227.7	307.6	362.1	377.9
77.5°	124.7	199.8	281.0	335.5	351.2
80°	96.9	172.0	254.3	308.8	325.8
82.5°	69.0	146.5	230.1	283.4	299.1
85°	47.2	124.7	207.1	259.2	274.9
87.5°	27.9	104.2	185.3	237.4	253.1
90°	13.3	87.2	168.3	219.2	235.0
92.5°	10.9	78.7	156.2	205.9	221.6
95°	9.7	70.2	146.5	195.0	209.5
97.5°	9.7	64.2	138.1	185.3	199.8
100°	8.5	56.9	128.4	174.4	190.1
102.5°	8.5	49.7	119.9	164.7	179.2
105°	7.3	43.6	111.4	155.0	168.3
107.5°	6.1	37.5	101.7	145.3	158.7
110°	6.1	31.5	93.3	135.6	149.0



TEST NUMBER: P243207

CATALOG NUMBER: S122DR-H1005D935-X4F0-XX-UDD-D-W

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.8	26.6	86.0	126.0	139.3
115°	4.8	20.6	77.5	116.3	129.6
117.5°	4.8	14.5	69.0	106.6	119.9
120°	3.6	9.7	61.8	98.1	110.2
122.5°	3.6	6.1	53.3	88.4	100.5
125°	3.6	2.4	46.0	78.7	90.8
127.5°	2.4	2.4	37.5	70.2	81.1
130°	2.4	1.2	30.3	60.6	71.5
132.5°	2.4	1.2	23.0	52.1	61.8
135°	1.2	1.2	15.7	42.4	53.3
137.5°	1.2	1.2	8.5	33.9	42.4
140°	1.2	0.0	3.6	25.4	32.7
142.5°	1.2	0.0	0.0	17.0	24.2
145°	1.2	0.0	0.0	9.7	14.5
147.5°	0.0	0.0	0.0	2.4	7.3
150°	0.0	0.0	0.0	0.0	1.2
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)