

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: P242280

Luminaire Tested: **S122DR-S485D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242280
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DR-S485D940-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1694.1 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

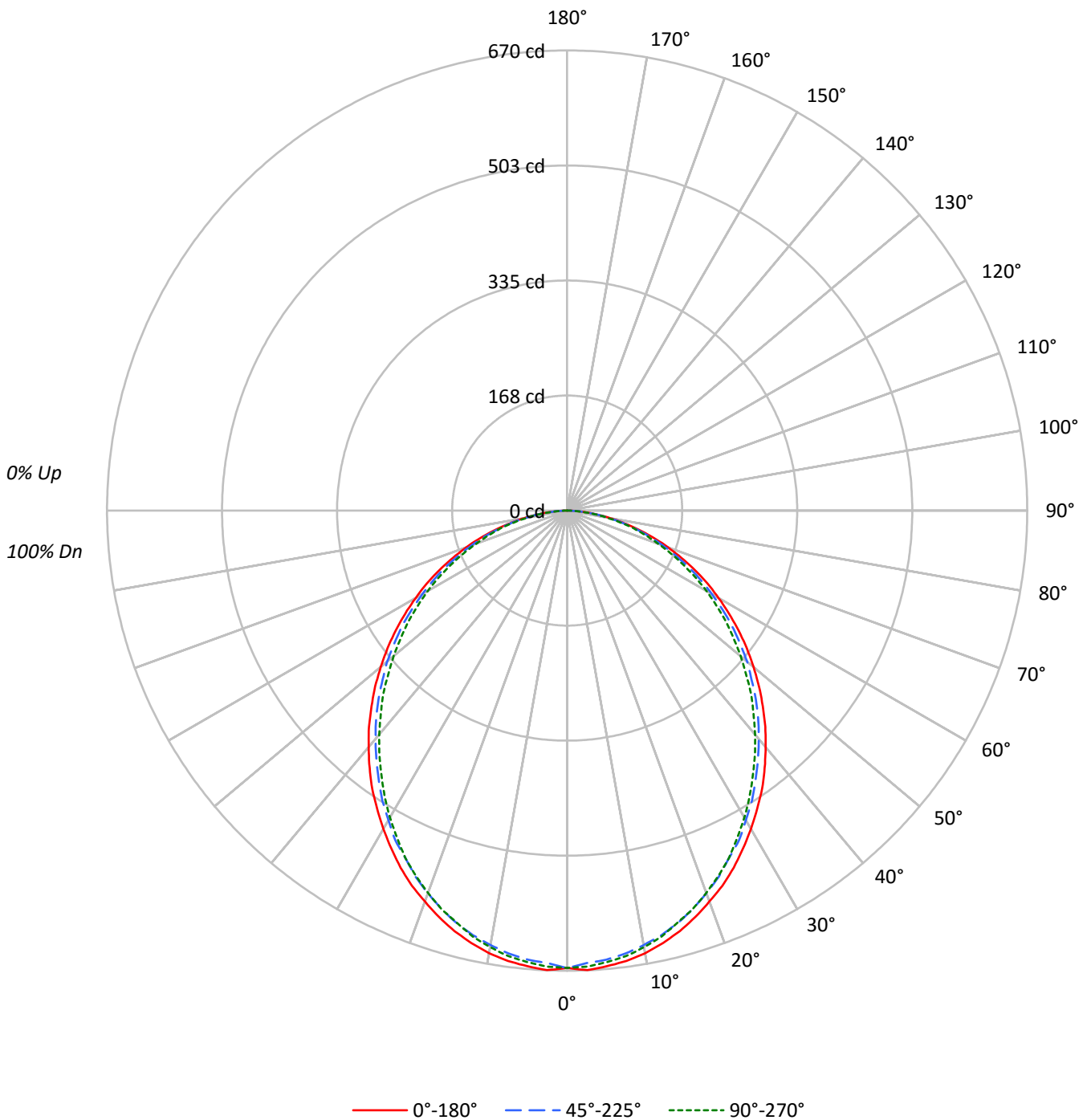
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12684	12684	12684
5°	12732	12549	12621
10°	12657	12421	12483
15°	12500	12260	12248
20°	12278	12018	12006
25°	12057	11721	11721
30°	11774	11448	11351
35°	11508	11122	10957
40°	11177	10794	10588
45°	10848	10468	10209
50°	10493	10132	9770
55°	10122	9737	9378
60°	9707	9269	8926
65°	9262	8802	8397
70°	8699	8237	7847
75°	7919	7588	7396
80°	7020	6812	6461
85°	5748	5464	4895



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.7	3.7
10°-20°	176.3	10.4
20°-30°	259.1	15.3
30°-40°	301.0	17.8
40°-50°	300.6	17.7
50°-60°	262.1	15.5
60°-70°	193.8	11.4
70°-80°	109.6	6.5
80°-90°	28.9	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	498.1	29.4
0°-40°	799.1	47.2
0°-60°	1361.8	80.4
0°-90°	1694.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1694.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	666	666	666	666	666	
5°	666	663	656	661	660	63
15°	634	630	622	624	621	179
25°	574	569	558	559	558	264
35°	495	488	478	474	471	309
45°	403	398	389	382	379	311
55°	305	301	293	286	282	273
65°	206	202	195	190	186	203
75°	108	106	103	99	100	115
85°	26	26	25	23	22	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	665.9	665.9	665.9	665.9	665.9
2.5°	669.7	666.5	659.5	665.9	664.6
5°	665.9	663.3	656.3	661.4	660.1
7.5°	661.4	657.6	650.5	655.6	654.4
10°	654.4	649.9	642.2	647.3	645.4
12.5°	644.8	640.9	633.2	636.4	635.2
15°	633.9	630.0	621.7	624.3	621.1
17.5°	620.4	616.6	608.3	611.5	608.3
20°	605.7	601.9	592.9	594.8	592.3
22.5°	591.0	585.2	576.9	576.9	575.6
25°	573.7	568.6	557.7	559.0	557.7
27.5°	554.5	550.0	541.7	539.7	536.5
30°	535.3	530.1	520.5	518.6	516.1
32.5°	514.8	510.9	500.7	496.9	494.3
35°	494.9	488.5	478.3	474.4	471.2
37.5°	472.5	466.8	456.5	452.0	448.8
40°	449.5	444.3	434.1	428.3	425.8
42.5°	427.1	421.9	411.7	405.3	401.5
45°	402.7	398.2	388.6	381.6	379.0
47.5°	379.0	374.6	364.3	357.3	353.4
50°	354.1	350.9	341.9	332.9	329.7
52.5°	329.7	325.3	316.9	309.9	305.4
55°	304.8	300.9	293.2	285.6	282.4
57.5°	279.8	276.6	268.3	260.6	258.0
60°	254.8	252.3	243.3	236.3	234.3
62.5°	230.5	226.0	219.6	213.2	210.6
65°	205.5	201.7	195.3	189.5	186.3
67.5°	179.9	176.7	171.0	166.5	163.9
70°	156.2	153.7	147.9	143.4	140.9
72.5°	131.9	129.3	126.1	121.7	119.7
75°	107.6	106.3	103.1	99.2	100.5
77.5°	85.8	83.2	82.0	80.0	78.1
80°	64.0	63.4	62.1	60.2	58.9
82.5°	43.5	43.5	42.9	40.3	40.3
85°	26.3	25.6	25.0	23.0	22.4
87.5°	11.5	10.2	9.0	7.0	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)