

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: P242251

Luminaire Tested: **S122DR-S485D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242251
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-S485D927-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1505.0 lumens
Efficiency: N/A
Efficacy: 80.1 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

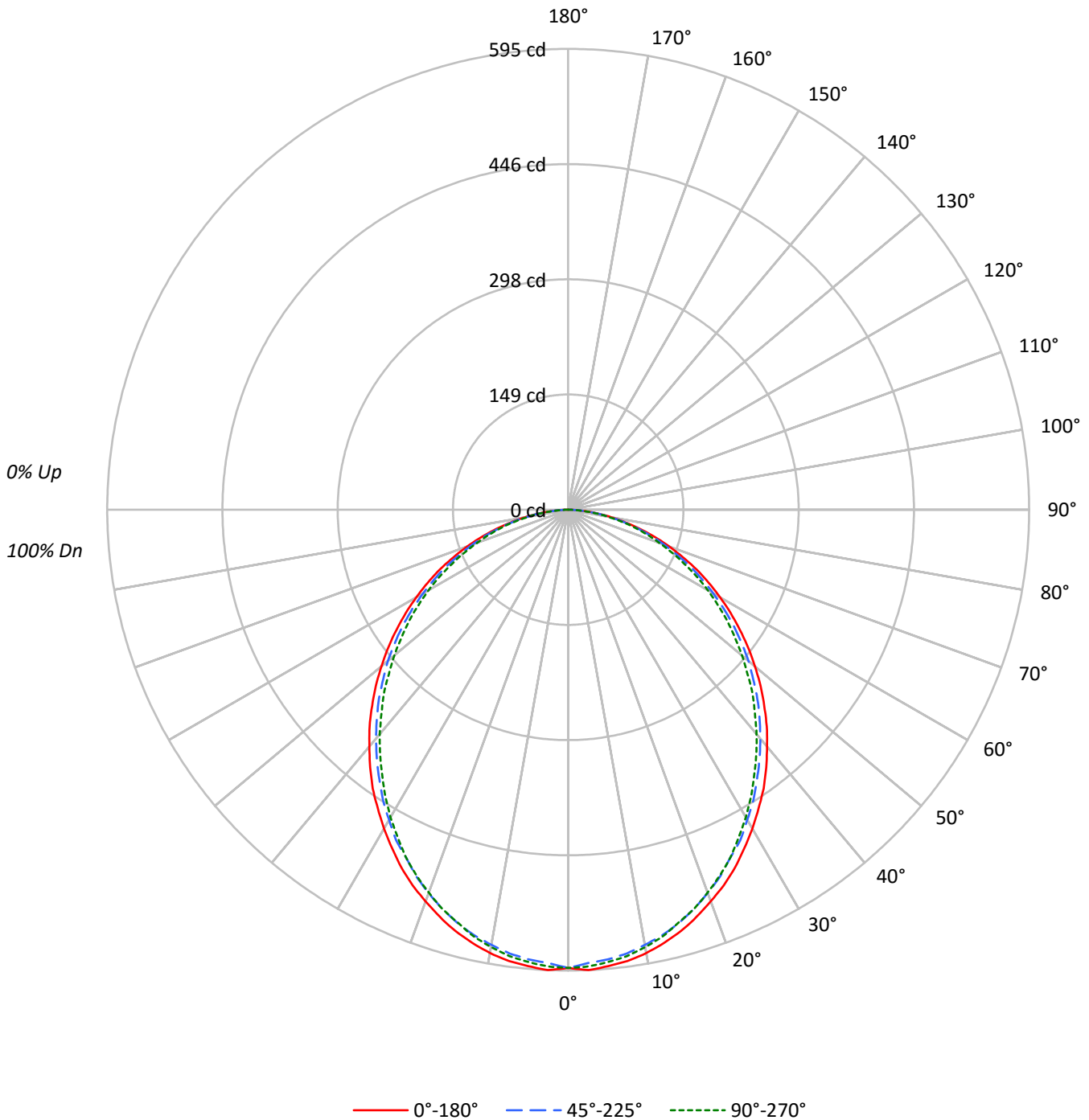
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	27	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11269	11269	11269
5°	11312	11147	11212
10°	11243	11034	11090
15°	11104	10891	10879
20°	10907	10676	10664
25°	10712	10412	10412
30°	10458	10170	10084
35°	10224	9880	9734
40°	9929	9590	9406
45°	9638	9302	9070
50°	9323	9000	8679
55°	8993	8651	8329
60°	8625	8232	7931
65°	8230	7820	7459
70°	7730	7318	6967
75°	7036	6741	6572
80°	6241	6055	5737
85°	5092	4852	4349



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.7	3.7
10°-20°	156.7	10.4
20°-30°	230.2	15.3
30°-40°	267.4	17.8
40°-50°	267.0	17.7
50°-60°	232.8	15.5
60°-70°	172.1	11.4
70°-80°	97.4	6.5
80°-90°	25.7	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°	442.5	29.4
0°-40°	709.9	47.2
0°-60°	1209.8	80.4
0°-90°	1505.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1505.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	592	592	592	592	592	
5°	592	589	583	588	586	56
15°	563	560	552	555	552	159
25°	510	505	495	497	495	235
35°	440	434	425	422	419	275
45°	358	354	345	339	337	276
55°	271	267	260	254	251	242
65°	183	179	174	168	166	181
75°	96	94	92	88	89	102
85°	23	23	22	20	20	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	591.6	591.6	591.6	591.6	591.6
2.5°	595.0	592.1	585.9	591.6	590.4
5°	591.6	589.3	583.0	587.6	586.4
7.5°	587.6	584.2	577.9	582.5	581.3
10°	581.3	577.3	570.5	575.1	573.4
12.5°	572.8	569.4	562.6	565.4	564.3
15°	563.1	559.7	552.3	554.6	551.7
17.5°	551.2	547.8	540.4	543.2	540.4
20°	538.1	534.7	526.7	528.4	526.1
22.5°	525.0	519.9	512.5	512.5	511.4
25°	509.7	505.1	495.4	496.6	495.4
27.5°	492.6	488.6	481.2	479.5	476.7
30°	475.5	471.0	462.4	460.7	458.5
32.5°	457.3	453.9	444.8	441.4	439.1
35°	439.7	434.0	424.9	421.5	418.6
37.5°	419.8	414.7	405.6	401.6	398.7
40°	399.3	394.8	385.7	380.5	378.3
42.5°	379.4	374.8	365.7	360.1	356.6
45°	357.8	353.8	345.3	339.0	336.7
47.5°	336.7	332.8	323.7	317.4	314.0
50°	314.6	311.7	303.7	295.8	292.9
52.5°	292.9	289.0	281.6	275.3	271.3
55°	270.8	267.3	260.5	253.7	250.8
57.5°	248.6	245.7	238.3	231.5	229.2
60°	226.4	224.1	216.1	209.9	208.2
62.5°	204.8	200.8	195.1	189.4	187.1
65°	182.6	179.2	173.5	168.4	165.5
67.5°	159.8	157.0	151.9	147.9	145.6
70°	138.8	136.5	131.4	127.4	125.1
72.5°	117.2	114.9	112.1	108.1	106.4
75°	95.6	94.4	91.6	88.2	89.3
77.5°	76.2	73.9	72.8	71.1	69.4
80°	56.9	56.3	55.2	53.5	52.3
82.5°	38.7	38.7	38.1	35.8	35.8
85°	23.3	22.8	22.2	20.5	19.9
87.5°	10.2	9.1	8.0	6.3	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)