

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: P243130

Luminaire Tested: **S122DR-H485D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243130
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-48)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DR-H485D930-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1500.7 lumens
Efficiency: N/A
Efficacy: 87.3 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

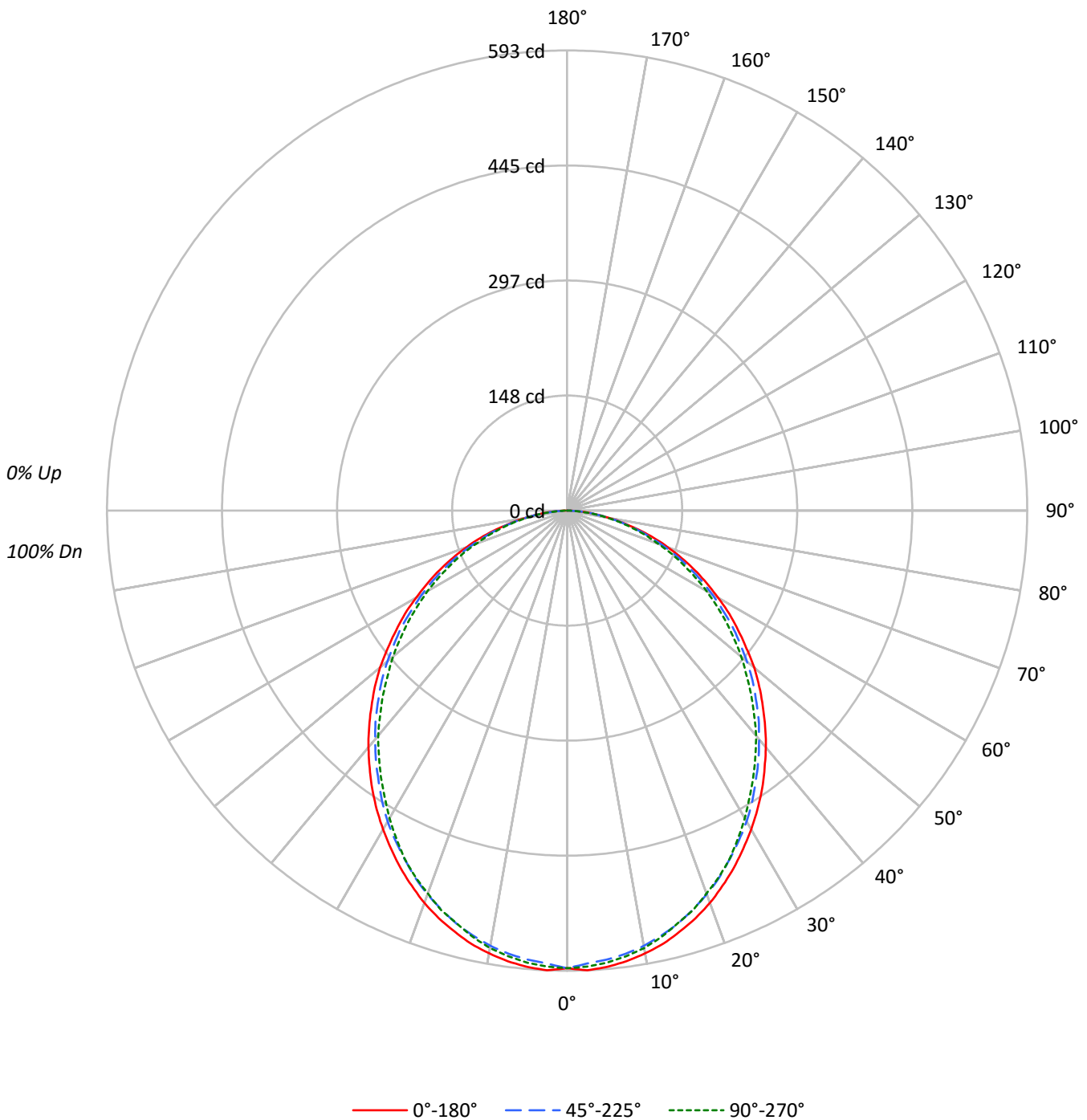
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11232	11232	11232
5°	11287	11109	11184
10°	11206	11017	11071
15°	11073	10869	10858
20°	10907	10666	10644
25°	10681	10418	10408
30°	10436	10175	10067
35°	10187	9859	9731
40°	9906	9568	9421
45°	9606	9269	9035
50°	9325	8955	8682
55°	8936	8628	8302
60°	8552	8221	7909
65°	8180	7788	7446
70°	7691	7296	6934
75°	6999	6719	6403
80°	6077	5901	5660
85°	5223	4633	4284



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.5	3.7
10°-20°	156.3	10.4
20°-30°	229.8	15.3
30°-40°	266.8	17.8
40°-50°	266.5	17.8
50°-60°	232.1	15.5
60°-70°	171.6	11.4
70°-80°	96.8	6.4
80°-90°	25.2	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°	441.6	29.4
0°-40°	708.5	47.2
0°-60°	1207.1	80.4
0°-90°	1500.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1500.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	590	588	581	586	585	56
15°	562	559	551	553	551	158
25°	508	504	496	495	495	234
35°	438	433	424	420	418	274
45°	357	353	344	339	335	275
55°	269	267	260	253	250	241
65°	182	179	173	167	165	179
75°	95	95	91	88	87	101
85°	24	23	21	20	20	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	589.7	589.7	589.7	589.7	589.7
2.5°	593.0	590.3	584.3	589.2	588.1
5°	590.3	587.6	581.0	585.9	584.9
7.5°	585.9	583.2	576.2	581.0	579.4
10°	579.4	576.2	569.6	572.9	572.4
12.5°	571.8	568.5	560.9	563.7	562.6
15°	561.5	558.8	551.2	553.3	550.6
17.5°	550.6	546.3	539.2	541.4	539.7
20°	538.1	533.8	526.2	527.2	525.1
22.5°	523.4	519.1	512.0	512.0	510.9
25°	508.2	503.9	495.7	495.2	495.2
27.5°	491.4	487.6	479.4	477.8	476.7
30°	474.5	471.3	462.6	459.3	457.7
32.5°	456.6	452.2	444.1	440.3	437.6
35°	438.1	433.2	424.0	420.2	418.5
37.5°	418.0	413.1	404.9	401.7	398.4
40°	398.4	394.1	384.8	379.9	378.9
42.5°	377.8	373.4	365.3	359.8	356.6
45°	356.6	352.8	344.1	338.6	335.4
47.5°	335.9	331.6	324.0	317.4	313.1
50°	314.7	310.4	302.2	294.6	293.0
52.5°	291.3	288.6	280.5	273.4	271.2
55°	269.1	266.9	259.8	252.7	250.0
57.5°	247.9	245.1	237.0	231.6	228.3
60°	224.5	222.9	215.8	209.8	207.6
62.5°	202.7	200.6	194.6	188.6	185.9
65°	181.5	178.8	172.8	167.4	165.2
67.5°	159.8	157.1	152.2	147.8	145.7
70°	138.1	135.9	131.0	127.2	124.5
72.5°	116.9	114.7	110.3	106.5	106.0
75°	95.1	94.6	91.3	88.1	87.0
77.5°	75.0	74.5	72.3	70.7	69.6
80°	55.4	55.4	53.8	52.2	51.6
82.5°	38.0	38.6	37.0	35.9	35.9
85°	23.9	22.8	21.2	20.1	19.6
87.5°	9.8	8.2	7.6	6.0	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)