

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: P242618

Luminaire Tested: **S124DR-S350D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242618
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DR-S350D935-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1204.2 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

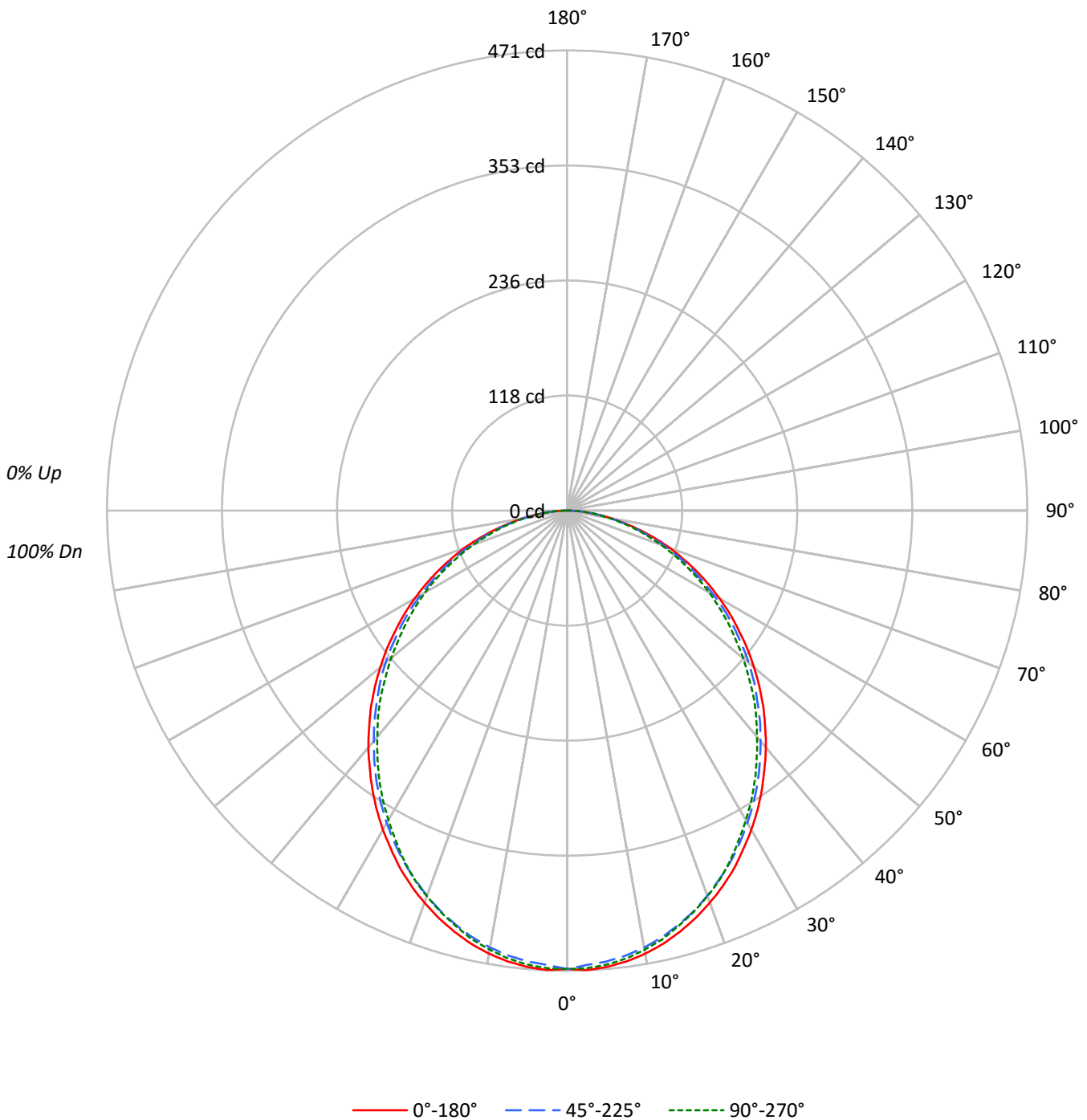
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	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	52	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4171	4171	4171
5°	4183	4133	4163
10°	4156	4099	4119
15°	4106	4041	4051
20°	4040	3968	3972
25°	3963	3886	3875
30°	3871	3789	3755
35°	3773	3687	3638
40°	3673	3573	3508
45°	3568	3459	3393
50°	3452	3359	3254
55°	3327	3228	3123
60°	3202	3081	2987
65°	3060	2940	2823
70°	2903	2755	2648
75°	2658	2531	2466
80°	2365	2273	2211
85°	2070	1989	1958



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.2	3.7
10°-20°	124.6	10.3
20°-30°	183.4	15.2
30°-40°	213.1	17.7
40°-50°	213.1	17.7
50°-60°	186.4	15.5
60°-70°	138.4	11.5
70°-80°	78.5	6.5
80°-90°	22.5	1.9
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°	352.2	29.2
0°-40°	565.3	46.9
0°-60°	964.8	80.1
0°-90°	1204.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1204.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	469	469	469	469	469	
5°	469	467	463	467	466	44
15°	446	445	439	441	440	126
25°	404	402	396	397	395	186
35°	348	345	340	337	335	217
45°	284	281	275	271	270	219
55°	215	214	208	204	202	192
65°	146	144	140	136	134	144
75°	77	76	74	72	72	82
85°	20	20	20	20	19	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	469.2	469.2	469.2	469.2	469.2
2.5°	470.7	469.5	465.4	469.2	468.8
5°	468.8	467.3	463.2	467.3	466.5
7.5°	465.4	463.9	459.4	462.8	462.4
10°	460.5	459.0	454.1	457.1	456.4
12.5°	454.1	452.6	447.4	450.7	449.6
15°	446.2	444.7	439.1	441.3	440.2
17.5°	437.2	435.3	430.1	431.6	430.8
20°	427.1	425.2	419.5	420.7	419.9
22.5°	416.2	413.5	407.9	410.1	408.6
25°	404.1	401.5	396.2	396.6	395.1
27.5°	390.6	388.0	383.1	382.3	380.4
30°	377.1	374.1	369.2	367.7	365.8
32.5°	362.8	360.1	354.9	353.0	351.1
35°	347.7	345.1	339.8	337.2	335.3
37.5°	331.9	329.7	324.1	321.4	318.8
40°	316.5	313.5	307.9	304.1	302.3
42.5°	300.0	298.5	292.1	287.6	286.5
45°	283.8	281.2	275.2	271.0	269.9
47.5°	266.9	265.0	259.4	254.9	251.9
50°	249.6	248.1	242.9	237.6	235.3
52.5°	232.7	230.8	225.2	220.7	217.7
55°	214.7	213.5	208.3	203.8	201.5
57.5°	197.7	196.6	191.4	186.8	184.6
60°	180.1	178.2	173.3	169.9	168.0
62.5°	162.8	161.3	156.0	153.0	151.1
65°	145.5	143.6	139.8	136.1	134.2
67.5°	127.8	126.3	122.6	118.8	118.4
70°	111.7	109.0	106.0	103.0	101.9
72.5°	94.4	91.7	89.5	87.2	86.1
75°	77.4	75.6	73.7	72.2	71.8
77.5°	60.9	60.1	58.3	57.9	56.8
80°	46.2	45.1	44.4	43.6	43.2
82.5°	32.0	31.6	31.6	31.2	30.8
85°	20.3	20.3	19.5	19.5	19.2
87.5°	9.8	9.4	9.0	9.0	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)