

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: P243459

Luminaire Tested: **S124DR-H350D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243459
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-84)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DR-H350D830-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1337.1 lumens
Efficiency: N/A
Efficacy: 119.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

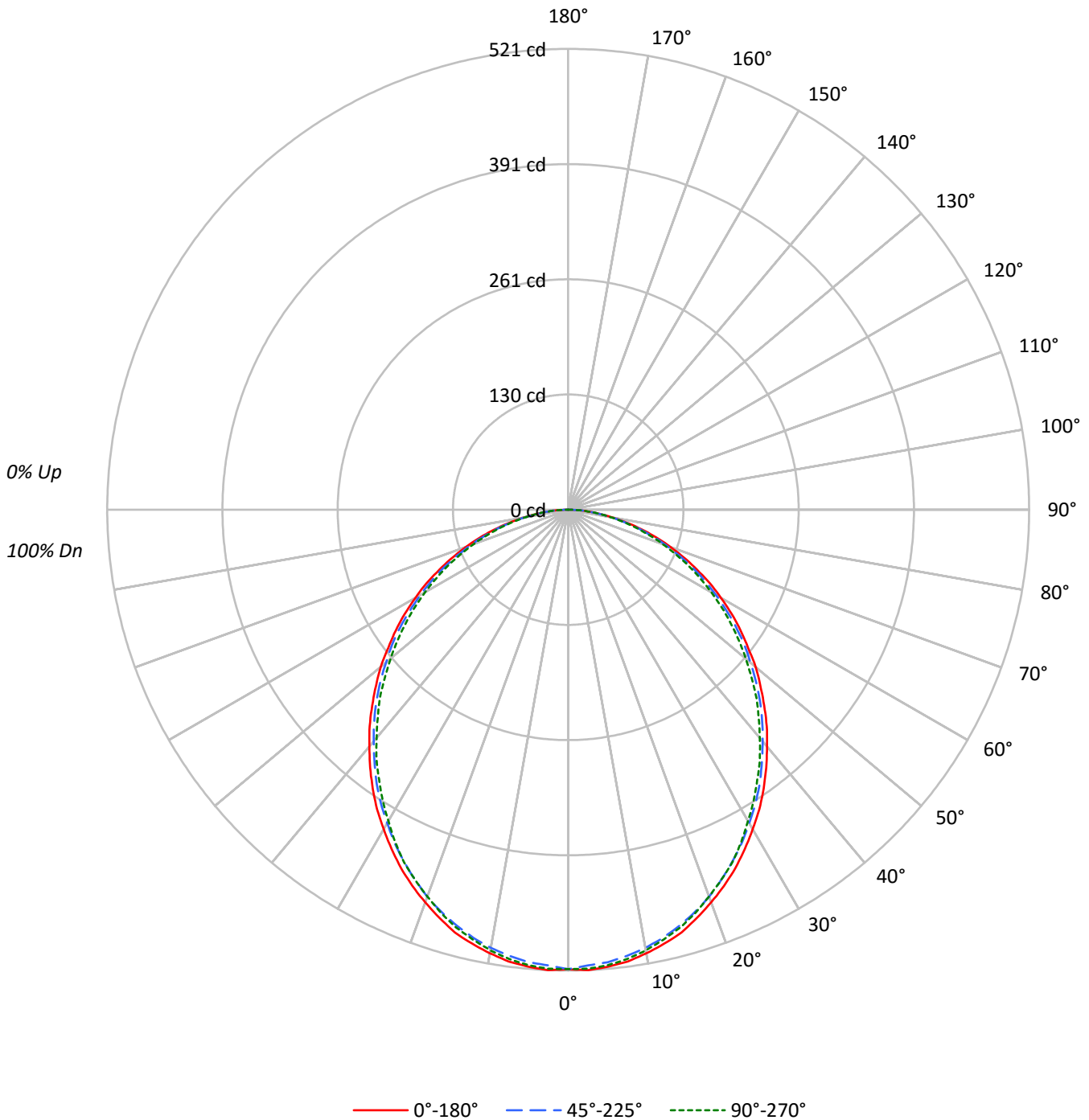
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	46	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	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	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4617	4617	4617
5°	4627	4582	4611
10°	4596	4539	4566
15°	4554	4480	4500
20°	4470	4405	4401
25°	4385	4307	4311
30°	4281	4199	4172
35°	4178	4095	4044
40°	4055	3967	3908
45°	3937	3857	3783
50°	3828	3717	3623
55°	3687	3589	3478
60°	3547	3426	3321
65°	3378	3262	3155
70°	3197	3054	2955
75°	2947	2830	2744
80°	2595	2554	2488
85°	2285	2285	2244



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.0	3.7
10°-20°	138.1	10.3
20°-30°	203.3	15.2
30°-40°	236.6	17.7
40°-50°	236.7	17.7
50°-60°	207.0	15.5
60°-70°	153.7	11.5
70°-80°	87.6	6.5
80°-90°	25.2	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°	390.3	29.2
0°-40°	626.9	46.9
0°-60°	1070.5	80.1
0°-90°	1337.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1337.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	519	519	519	519	519	
5°	518	518	514	517	517	49
15°	495	492	487	490	489	139
25°	447	445	439	440	440	206
35°	385	382	377	374	373	241
45°	313	312	307	302	301	242
55°	238	236	232	226	224	213
65°	161	159	155	152	150	159
75°	86	84	82	81	80	91
85°	22	22	22	22	22	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	519.4	519.4	519.4	519.4	519.4
2.5°	521.1	519.8	515.6	519.8	519.4
5°	518.5	517.7	513.5	517.3	516.8
7.5°	515.2	513.5	508.8	512.6	512.2
10°	509.2	508.0	502.9	506.7	505.9
12.5°	502.5	501.2	495.7	498.7	497.8
15°	494.9	492.3	486.8	489.8	489.0
17.5°	483.9	482.2	476.7	479.2	478.0
20°	472.5	470.4	465.7	466.1	465.3
22.5°	460.2	458.1	452.6	454.3	452.6
25°	447.1	445.0	439.1	440.4	439.5
27.5°	432.3	430.2	424.7	425.1	423.5
30°	417.1	414.6	409.1	408.7	406.5
32.5°	401.9	399.4	393.9	392.2	390.1
35°	385.0	381.6	377.4	374.0	372.7
37.5°	367.7	366.0	359.6	357.5	355.8
40°	349.5	347.8	341.9	338.9	336.8
42.5°	332.2	330.1	324.6	320.3	318.6
45°	313.2	311.9	306.8	302.2	300.9
47.5°	294.6	294.1	287.8	283.1	281.0
50°	276.8	274.3	268.8	264.6	262.0
52.5°	256.1	255.7	251.0	245.5	243.4
55°	237.9	236.2	231.6	226.5	224.4
57.5°	218.9	218.1	212.1	207.9	205.8
60°	199.5	197.8	192.7	188.9	186.8
62.5°	180.9	178.8	174.1	170.3	168.2
65°	160.6	159.3	155.1	151.7	150.0
67.5°	141.6	139.9	135.7	132.7	131.0
70°	123.0	120.4	117.5	114.9	113.7
72.5°	104.4	102.3	99.7	98.0	96.4
75°	85.8	84.1	82.4	80.7	79.9
77.5°	68.0	66.3	65.5	65.1	64.2
80°	50.7	49.9	49.9	49.4	48.6
82.5°	35.9	35.1	35.1	35.1	34.7
85°	22.4	22.0	22.4	21.6	22.0
87.5°	10.6	10.6	11.0	10.6	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)