

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: P242599

Luminaire Tested: **S124DR-S350D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242599
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-S350D830-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1318.3 lumens
Efficiency: N/A
Efficacy: 113.6 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

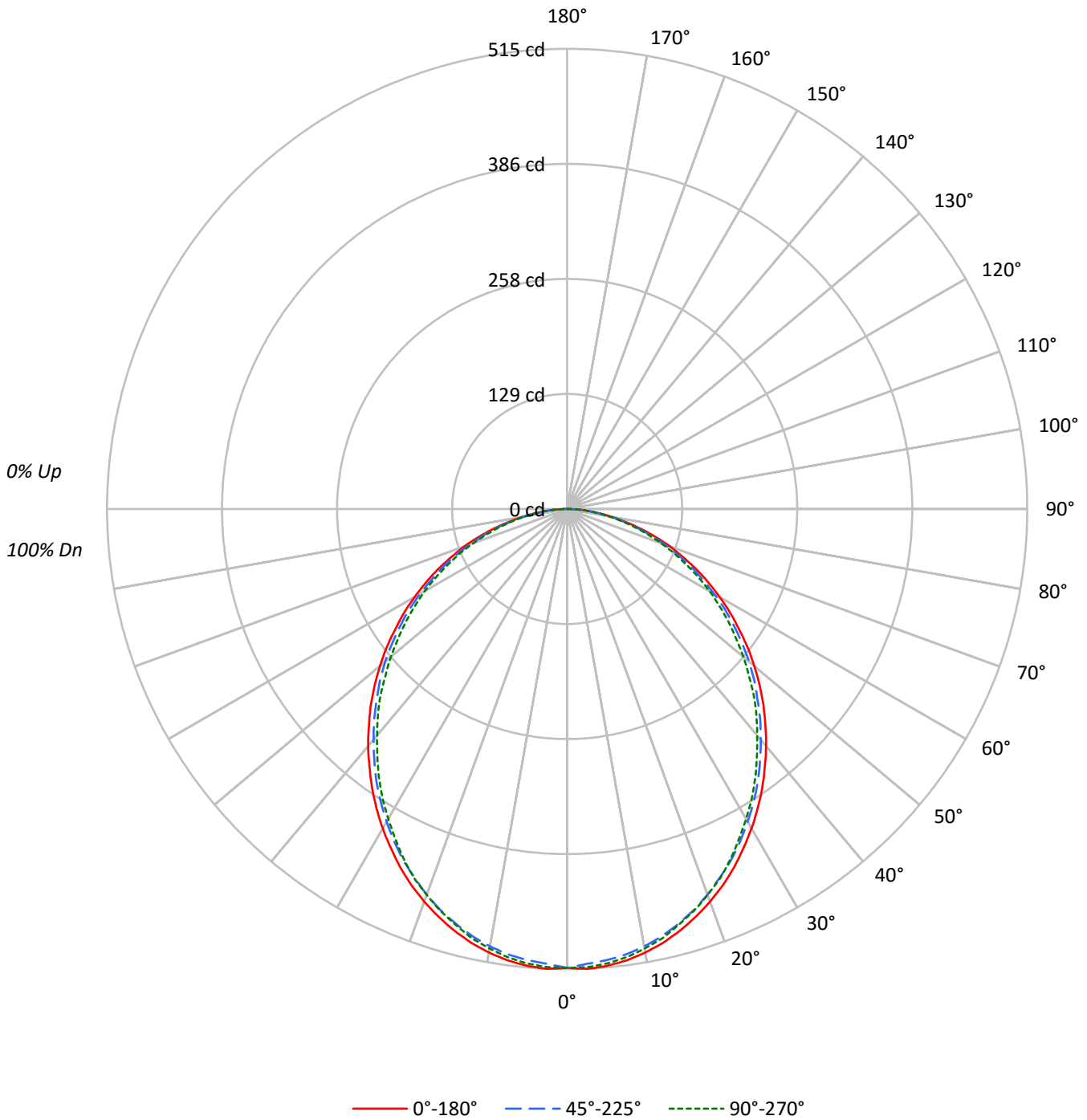
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4565	4565	4565
5°	4579	4524	4557
10°	4550	4487	4509
15°	4495	4424	4435
20°	4422	4345	4348
25°	4339	4255	4242
30°	4237	4148	4110
35°	4131	4037	3984
40°	4021	3910	3840
45°	3906	3786	3715
50°	3779	3677	3562
55°	3642	3533	3419
60°	3504	3372	3271
65°	3351	3220	3090
70°	3176	3017	2898
75°	2912	2772	2699
80°	2590	2488	2421
85°	2264	2183	2142



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.4	3.7
10°-20°	136.4	10.3
20°-30°	200.7	15.2
30°-40°	233.3	17.7
40°-50°	233.3	17.7
50°-60°	204.1	15.5
60°-70°	151.5	11.5
70°-80°	86.0	6.5
80°-90°	24.6	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°	385.5	29.2
0°-40°	618.8	46.9
0°-60°	1056.2	80.1
0°-90°	1318.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1318.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	514	514	514	514	514	
5°	513	512	507	512	511	49
15°	488	487	481	483	482	138
25°	442	440	434	434	432	204
35°	381	378	372	369	367	238
45°	311	308	301	297	296	240
55°	235	234	228	223	221	210
65°	159	157	153	149	147	158
75°	85	83	81	79	79	90
85°	22	22	21	21	21	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	513.6	513.6	513.6	513.6	513.6
2.5°	515.2	514.0	509.5	513.6	513.2
5°	513.2	511.5	507.0	511.5	510.7
7.5°	509.5	507.8	502.9	506.6	506.2
10°	504.1	502.5	497.1	500.4	499.6
12.5°	497.1	495.5	489.7	493.4	492.2
15°	488.5	486.8	480.7	483.1	481.9
17.5°	478.6	476.6	470.8	472.4	471.6
20°	467.5	465.4	459.3	460.5	459.7
22.5°	455.6	452.7	446.5	449.0	447.3
25°	442.4	439.5	433.8	434.2	432.5
27.5°	427.6	424.7	419.4	418.5	416.5
30°	412.8	409.5	404.1	402.5	400.4
32.5°	397.1	394.3	388.5	386.4	384.4
35°	380.7	377.8	372.0	369.1	367.1
37.5°	363.4	360.9	354.7	351.9	349.0
40°	346.5	343.2	337.0	332.9	330.9
42.5°	328.4	326.8	319.8	314.8	313.6
45°	310.7	307.8	301.2	296.7	295.5
47.5°	292.2	290.1	284.0	279.0	275.7
50°	273.3	271.6	265.9	260.1	257.6
52.5°	254.7	252.7	246.5	241.6	238.3
55°	235.0	233.8	228.0	223.1	220.6
57.5°	216.5	215.2	209.5	204.5	202.1
60°	197.1	195.1	189.7	186.0	184.0
62.5°	178.2	176.5	170.8	167.5	165.4
65°	159.3	157.2	153.1	149.0	146.9
67.5°	139.9	138.3	134.2	130.0	129.6
70°	122.2	119.3	116.1	112.8	111.5
72.5°	103.3	100.4	97.9	95.5	94.2
75°	84.8	82.7	80.7	79.0	78.6
77.5°	66.7	65.8	63.8	63.4	62.1
80°	50.6	49.4	48.6	47.7	47.3
82.5°	35.0	34.6	34.6	34.2	33.7
85°	22.2	22.2	21.4	21.4	21.0
87.5°	10.7	10.3	9.9	9.9	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)