

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: P243468

Luminaire Tested: **S124DR-H350D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243468
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-H350D840-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1432.5 lumens
Efficiency: N/A
Efficacy: 127.9 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

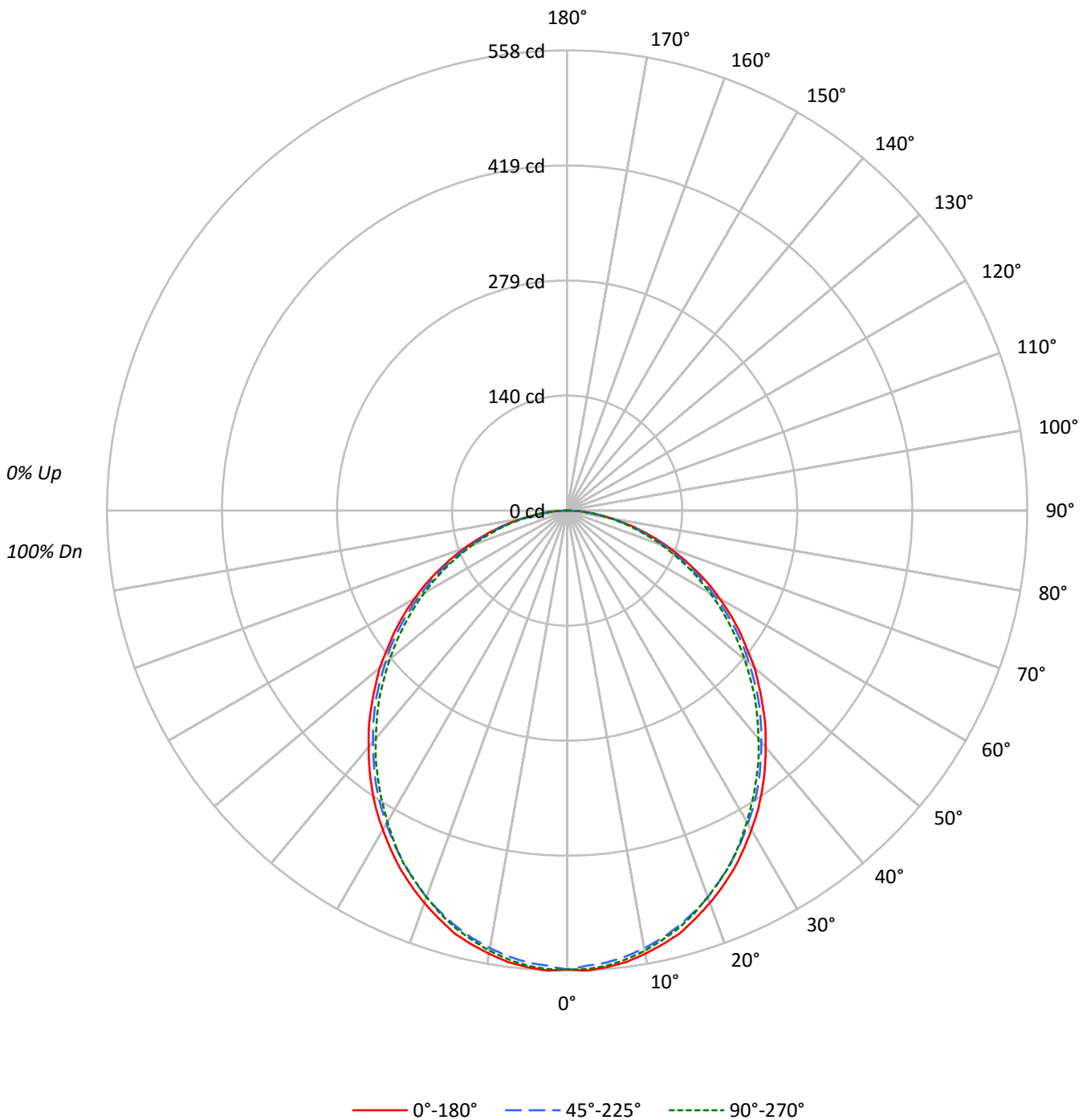
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4947	4947	4947
5°	4958	4908	4941
10°	4925	4863	4892
15°	4879	4800	4821
20°	4788	4720	4716
25°	4699	4614	4619
30°	4587	4499	4471
35°	4476	4387	4334
40°	4346	4250	4188
45°	4218	4132	4053
50°	4102	3983	3882
55°	3950	3845	3726
60°	3799	3671	3557
65°	3620	3496	3380
70°	3425	3272	3166
75°	3156	3033	2940
80°	2780	2734	2667
85°	2448	2448	2397



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.5	3.7
10°-20°	147.9	10.3
20°-30°	217.8	15.2
30°-40°	253.4	17.7
40°-50°	253.6	17.7
50°-60°	221.8	15.5
60°-70°	164.7	11.5
70°-80°	93.8	6.6
80°-90°	27.0	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°	418.2	29.2
0°-40°	671.7	46.9
0°-60°	1147.0	80.1
0°-90°	1432.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1432.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	556	556	556	556	556	
5°	556	555	550	554	554	53
15°	530	528	522	525	524	149
25°	479	477	470	472	471	220
35°	412	409	404	401	399	258
45°	336	334	329	324	322	259
55°	255	253	248	243	240	228
65°	172	171	166	163	161	171
75°	92	90	88	86	86	97
85°	24	24	24	23	24	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	556.5	556.5	556.5	556.5	556.5
2.5°	558.3	556.9	552.4	556.9	556.5
5°	555.6	554.7	550.1	554.2	553.8
7.5°	552.0	550.1	545.2	549.2	548.8
10°	545.6	544.3	538.8	542.9	542.0
12.5°	538.4	537.0	531.1	534.3	533.4
15°	530.2	527.5	521.6	524.8	523.9
17.5°	518.4	516.6	510.7	513.5	512.1
20°	506.2	504.0	499.0	499.4	498.5
22.5°	493.1	490.8	484.9	486.7	484.9
25°	479.1	476.8	470.4	471.8	470.9
27.5°	463.2	460.9	455.1	455.5	453.7
30°	446.9	444.2	438.3	437.8	435.6
32.5°	430.6	427.9	422.0	420.2	417.9
35°	412.5	408.9	404.3	400.7	399.4
37.5°	393.9	392.1	385.3	383.1	381.2
40°	374.5	372.6	366.3	363.1	360.9
42.5°	355.9	353.6	347.7	343.2	341.4
45°	335.5	334.2	328.7	323.7	322.4
47.5°	315.6	315.1	308.4	303.4	301.1
50°	296.6	293.9	288.0	283.4	280.7
52.5°	274.4	273.9	269.0	263.1	260.8
55°	254.9	253.1	248.1	242.7	240.4
57.5°	234.5	233.6	227.3	222.8	220.5
60°	213.7	211.9	206.5	202.4	200.1
62.5°	193.8	191.5	186.5	182.5	180.2
65°	172.1	170.7	166.2	162.6	160.7
67.5°	151.7	149.9	145.3	142.2	140.4
70°	131.8	129.0	125.9	123.2	121.8
72.5°	111.8	109.6	106.9	105.0	103.2
75°	91.9	90.1	88.3	86.5	85.6
77.5°	72.9	71.1	70.2	69.7	68.8
80°	54.3	53.4	53.4	53.0	52.1
82.5°	38.5	37.6	37.6	37.6	37.1
85°	24.0	23.5	24.0	23.1	23.5
87.5°	11.3	11.3	11.8	11.3	11.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)