

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: P243483

Luminaire Tested: **S124DR-H350D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243483
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-H350D940-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1265.0 lumens
Efficiency: N/A
Efficacy: 112.9 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

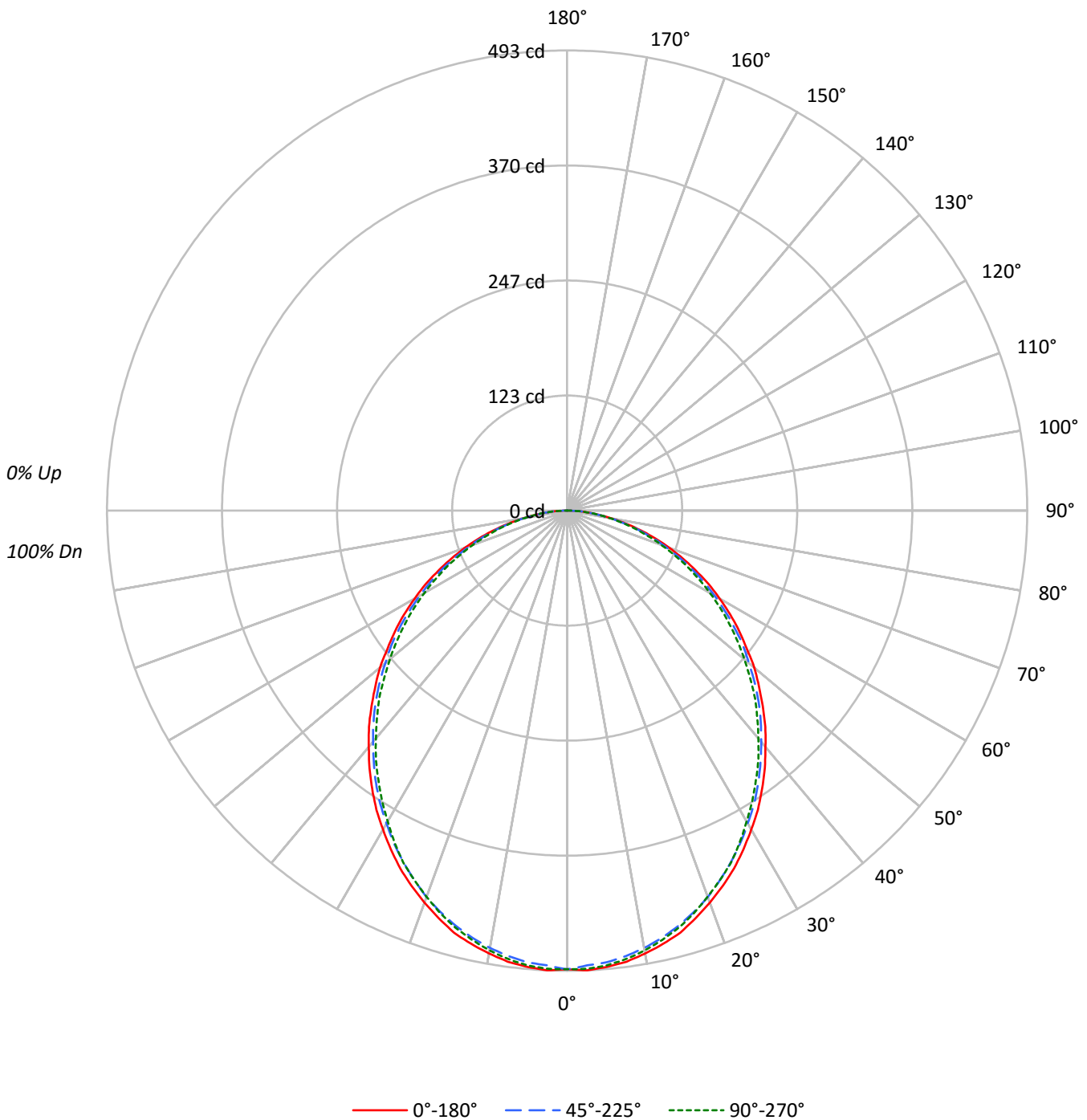
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4368	4368	4368
5°	4378	4335	4363
10°	4349	4295	4320
15°	4309	4239	4257
20°	4228	4168	4164
25°	4149	4074	4078
30°	4050	3972	3948
35°	3952	3874	3826
40°	3836	3753	3698
45°	3725	3649	3579
50°	3622	3517	3428
55°	3488	3395	3290
60°	3355	3241	3141
65°	3195	3086	2985
70°	3023	2887	2794
75°	2789	2679	2596
80°	2457	2416	2355
85°	2162	2162	2121



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.3	3.7
10°-20°	130.6	10.3
20°-30°	192.4	15.2
30°-40°	223.8	17.7
40°-50°	223.9	17.7
50°-60°	195.8	15.5
60°-70°	145.4	11.5
70°-80°	82.9	6.6
80°-90°	23.9	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°	369.3	29.2
0°-40°	593.1	46.9
0°-60°	1012.8	80.1
0°-90°	1265.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1265.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	491	491	491	491	491	
5°	491	490	486	489	489	47
15°	468	466	461	463	463	132
25°	423	421	415	417	416	195
35°	364	361	357	354	353	228
45°	296	295	290	286	285	229
55°	225	224	219	214	212	201
65°	152	151	147	144	142	151
75°	81	80	78	76	76	86
85°	21	21	21	20	21	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	491.4	491.4	491.4	491.4	491.4
2.5°	493.0	491.8	487.8	491.8	491.4
5°	490.6	489.8	485.8	489.4	489.0
7.5°	487.4	485.8	481.4	485.0	484.6
10°	481.8	480.6	475.8	479.4	478.6
12.5°	475.4	474.2	469.0	471.8	471.0
15°	468.2	465.8	460.6	463.4	462.6
17.5°	457.8	456.2	451.0	453.4	452.2
20°	447.0	445.0	440.6	441.0	440.2
22.5°	435.4	433.4	428.2	429.8	428.2
25°	423.0	421.0	415.4	416.6	415.8
27.5°	409.0	407.0	401.8	402.2	400.6
30°	394.6	392.2	387.0	386.6	384.6
32.5°	380.2	377.8	372.6	371.0	369.0
35°	364.2	361.0	357.0	353.8	352.6
37.5°	347.8	346.2	340.2	338.2	336.6
40°	330.6	329.0	323.4	320.7	318.7
42.5°	314.3	312.3	307.1	303.1	301.5
45°	296.3	295.1	290.3	285.9	284.7
47.5°	278.7	278.3	272.3	267.9	265.9
50°	261.9	259.5	254.3	250.3	247.9
52.5°	242.3	241.9	237.5	232.3	230.3
55°	225.1	223.5	219.1	214.3	212.3
57.5°	207.1	206.3	200.7	196.7	194.7
60°	188.7	187.1	182.3	178.7	176.7
62.5°	171.1	169.1	164.7	161.1	159.1
65°	151.9	150.7	146.7	143.5	141.9
67.5°	133.9	132.3	128.3	125.5	123.9
70°	116.3	113.9	111.1	108.7	107.5
72.5°	98.8	96.8	94.4	92.8	91.2
75°	81.2	79.6	78.0	76.4	75.6
77.5°	64.4	62.8	62.0	61.6	60.8
80°	48.0	47.2	47.2	46.8	46.0
82.5°	34.0	33.2	33.2	33.2	32.8
85°	21.2	20.8	21.2	20.4	20.8
87.5°	10.0	10.0	10.4	10.0	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)