

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: P242608

Luminaire Tested: **S124DR-S350D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242608
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-S350D840-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1412.4 lumens
Efficiency: N/A
Efficacy: 121.8 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

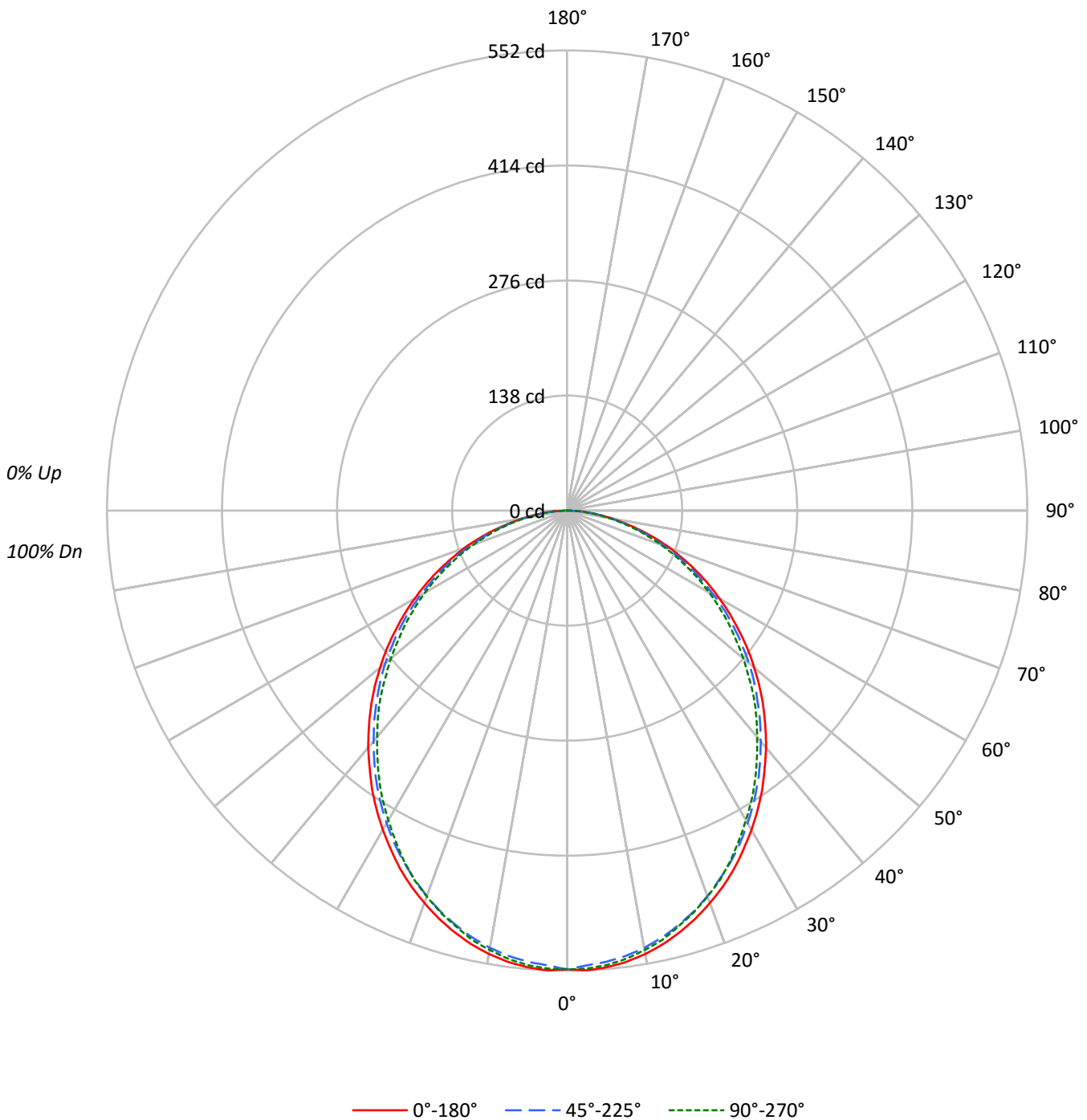
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4892	4892	4892
5°	4906	4847	4883
10°	4875	4807	4832
15°	4817	4739	4751
20°	4738	4655	4659
25°	4649	4558	4545
30°	4540	4444	4403
35°	4426	4325	4268
40°	4308	4190	4113
45°	4185	4058	3980
50°	4049	3938	3817
55°	3902	3786	3662
60°	3755	3614	3504
65°	3588	3449	3311
70°	3405	3230	3106
75°	3118	2967	2892
80°	2774	2662	2595
85°	2427	2336	2295



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.9	3.7
10°-20°	146.1	10.3
20°-30°	215.1	15.2
30°-40°	250.0	17.7
40°-50°	250.0	17.7
50°-60°	218.6	15.5
60°-70°	162.3	11.5
70°-80°	92.1	6.5
80°-90°	26.4	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°	413.0	29.2
0°-40°	663.0	46.9
0°-60°	1131.6	80.1
0°-90°	1412.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1412.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	550	550	550	550	550	
5°	550	548	543	548	547	52
15°	523	522	515	518	516	147
25°	474	471	465	465	463	218
35°	408	405	399	396	393	255
45°	333	330	323	318	317	257
55°	252	250	244	239	236	226
65°	171	168	164	160	157	169
75°	91	89	86	85	84	96
85°	24	24	23	23	22	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	550.3	550.3	550.3	550.3	550.3
2.5°	552.0	550.7	545.9	550.3	549.8
5°	549.8	548.1	543.2	548.1	547.2
7.5°	545.9	544.1	538.8	542.8	542.3
10°	540.1	538.4	532.6	536.2	535.3
12.5°	532.6	530.9	524.7	528.7	527.4
15°	523.4	521.6	515.0	517.7	516.3
17.5°	512.8	510.6	504.4	506.2	505.3
20°	500.9	498.7	492.1	493.4	492.5
22.5°	488.1	485.0	478.4	481.1	479.3
25°	474.0	470.9	464.7	465.2	463.4
27.5°	458.1	455.0	449.3	448.4	446.2
30°	442.3	438.7	433.0	431.2	429.0
32.5°	425.5	422.4	416.2	414.0	411.8
35°	407.9	404.8	398.6	395.5	393.3
37.5°	389.3	386.7	380.1	377.0	373.9
40°	371.3	367.7	361.1	356.7	354.5
42.5°	351.9	350.1	342.6	337.3	336.0
45°	332.9	329.8	322.8	317.9	316.6
47.5°	313.1	310.9	304.2	299.0	295.4
50°	292.8	291.0	284.8	278.7	276.0
52.5°	272.9	270.7	264.1	258.8	255.3
55°	251.8	250.4	244.3	239.0	236.3
57.5°	231.9	230.6	224.4	219.1	216.5
60°	211.2	209.0	203.3	199.3	197.1
62.5°	190.9	189.2	183.0	179.5	177.3
65°	170.6	168.4	164.0	159.6	157.4
67.5°	149.9	148.2	143.7	139.3	138.9
70°	131.0	127.9	124.3	120.8	119.5
72.5°	110.7	107.6	104.9	102.3	101.0
75°	90.8	88.6	86.4	84.7	84.2
77.5°	71.4	70.5	68.3	67.9	66.6
80°	54.2	52.9	52.0	51.1	50.7
82.5°	37.5	37.0	37.0	36.6	36.2
85°	23.8	23.8	22.9	22.9	22.5
87.5°	11.5	11.0	10.6	10.6	10.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)