

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: P242613

Luminaire Tested: **S124DR-S350D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242613
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-S350D930-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1140.3 lumens
Efficiency: N/A
Efficacy: 98.3 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

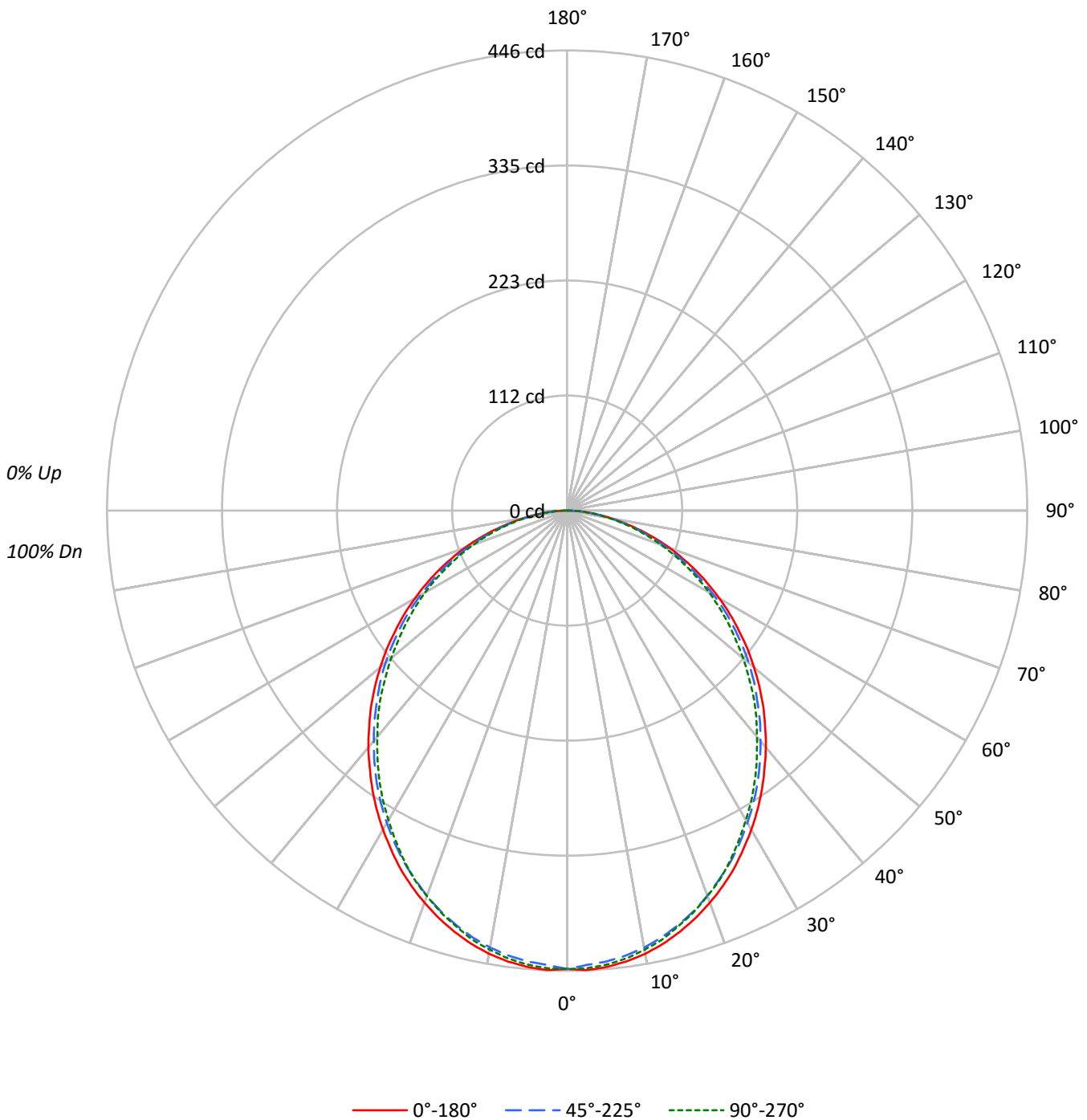
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3949	3949	3949
5°	3961	3914	3942
10°	3936	3881	3901
15°	3888	3826	3837
20°	3825	3758	3761
25°	3753	3680	3669
30°	3664	3588	3555
35°	3573	3492	3445
40°	3478	3382	3321
45°	3379	3276	3213
50°	3269	3181	3081
55°	3151	3056	2957
60°	3031	2917	2828
65°	2898	2785	2673
70°	2747	2609	2508
75°	2517	2397	2335
80°	2242	2150	2094
85°	1958	1887	1856



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.9	3.7
10°-20°	118.0	10.3
20°-30°	173.6	15.2
30°-40°	201.8	17.7
40°-50°	201.8	17.7
50°-60°	176.5	15.5
60°-70°	131.0	11.5
70°-80°	74.4	6.5
80°-90°	21.3	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°	333.5	29.2
0°-40°	535.3	46.9
0°-60°	913.6	80.1
0°-90°	1140.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1140.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	444	442	439	442	442	42
15°	422	421	416	418	417	119
25°	383	380	375	376	374	176
35°	329	327	322	319	318	206
45°	269	266	261	257	256	207
55°	203	202	197	193	191	182
65°	138	136	132	129	127	136
75°	73	72	70	68	68	78
85°	19	19	18	18	18	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	444.3	444.3	444.3	444.3	444.3
2.5°	445.7	444.6	440.7	444.3	443.9
5°	443.9	442.5	438.6	442.5	441.8
7.5°	440.7	439.3	435.0	438.2	437.9
10°	436.1	434.7	430.0	432.9	432.2
12.5°	430.0	428.6	423.6	426.8	425.8
15°	422.5	421.1	415.8	417.9	416.9
17.5°	414.0	412.2	407.2	408.7	408.0
20°	404.4	402.6	397.3	398.3	397.6
22.5°	394.1	391.6	386.2	388.4	386.9
25°	382.7	380.2	375.2	375.6	374.1
27.5°	369.9	367.4	362.7	362.0	360.3
30°	357.0	354.2	349.6	348.1	346.4
32.5°	343.5	341.0	336.0	334.3	332.5
35°	329.3	326.8	321.8	319.3	317.5
37.5°	314.3	312.2	306.9	304.4	301.9
40°	299.7	296.9	291.5	288.0	286.2
42.5°	284.1	282.6	276.6	272.3	271.3
45°	268.8	266.3	260.6	256.7	255.6
47.5°	252.7	251.0	245.6	241.4	238.5
50°	236.4	234.9	230.0	225.0	222.8
52.5°	220.4	218.6	213.2	209.0	206.1
55°	203.3	202.2	197.2	192.9	190.8
57.5°	187.2	186.2	181.2	176.9	174.8
60°	170.5	168.7	164.1	160.9	159.1
62.5°	154.1	152.7	147.7	144.9	143.1
65°	137.8	136.0	132.4	128.9	127.1
67.5°	121.0	119.6	116.0	112.5	112.1
70°	105.7	103.2	100.4	97.5	96.5
72.5°	89.4	86.9	84.7	82.6	81.5
75°	73.3	71.6	69.8	68.3	68.0
77.5°	57.7	57.0	55.2	54.8	53.8
80°	43.8	42.7	42.0	41.3	40.9
82.5°	30.3	29.9	29.9	29.5	29.2
85°	19.2	19.2	18.5	18.5	18.2
87.5°	9.3	8.9	8.5	8.5	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)