

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: P231688

Luminaire Tested: **S124-DR-LO-30-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231688
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29680)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124-DR-LO-30-X-0048-1-U-DD-1-W
Description: DEFINE 4 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1382.0 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.14 / 1.27
Luminous Opening: Rectangular (W 0.31' x L: 3.92' x H: 0')
CIE Type: Direct

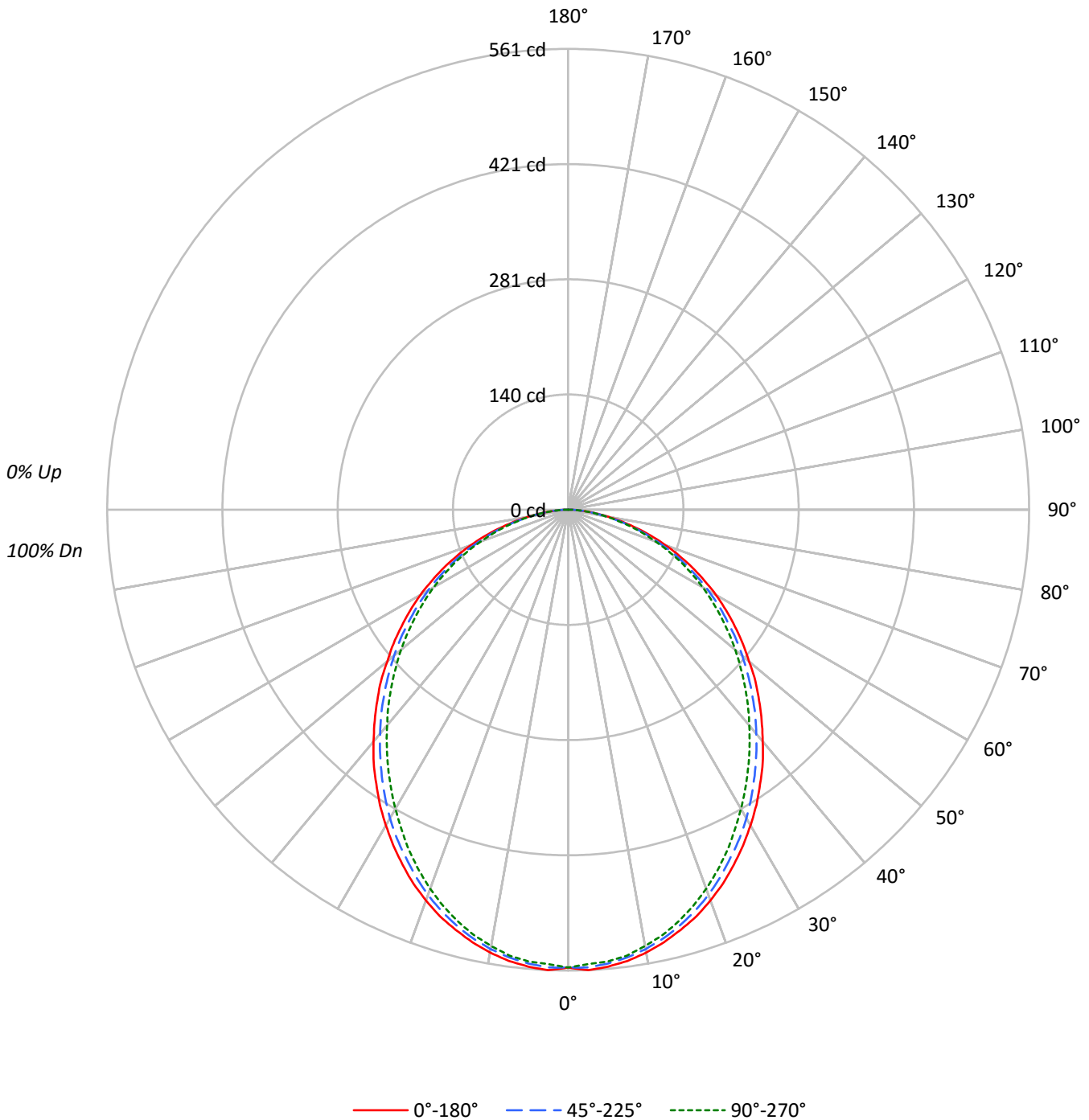
Input Watts (W): 13.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	97	106	102	98	95	98	95	92	94	92	89	90	88	87	84
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	65	73	68	63	71	66	62	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	28
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4994	4994	4994
5°	5022	4988	4966
10°	4981	4942	4907
15°	4911	4863	4815
20°	4827	4759	4682
25°	4714	4621	4527
30°	4591	4488	4351
35°	4454	4325	4180
40°	4309	4165	4010
45°	4164	4008	3852
50°	4006	3854	3703
55°	3870	3692	3543
60°	3726	3530	3385
65°	3534	3344	3212
70°	3301	3076	2953
75°	2967	2787	2704
80°	2539	2420	2394
85°	2138	2046	1995



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.5	3.8
10°-20°	147.2	10.7
20°-30°	214.5	15.5
30°-40°	246.3	17.8
40°-50°	243.6	17.6
50°-60°	211.7	15.3
60°-70°	156.5	11.3
70°-80°	86.2	6.2
80°-90°	23.4	1.7
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°	414.2	30.0
0°-40°	660.5	47.8
0°-60°	1115.8	80.7
0°-90°	1382.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1382.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	557	557	557	557	557	
5°	558	552	554	553	552	53
15°	529	523	524	520	519	149
25°	477	470	467	459	458	220
35°	407	401	395	384	382	255
45°	329	323	316	307	304	254
55°	248	244	236	229	227	222
65°	167	164	158	152	152	165
75°	86	83	80	79	78	91
85°	21	20	20	20	19	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	557.3	557.3	557.3	557.3	557.3
2.5°	561.1	555.4	557.8	556.4	553.6
5°	558.3	552.1	554.5	552.6	552.1
7.5°	554.0	547.9	549.8	547.4	547.4
10°	547.4	541.2	543.1	539.8	539.3
12.5°	539.3	532.7	534.6	530.4	530.4
15°	529.4	523.2	524.2	519.9	519.0
17.5°	519.0	511.9	512.4	507.1	505.7
20°	506.2	499.1	499.1	492.0	491.0
22.5°	492.5	485.4	483.9	475.9	474.9
25°	476.8	470.2	467.4	458.8	457.9
27.5°	460.7	454.1	451.3	441.3	439.0
30°	443.7	436.6	433.8	422.4	420.5
32.5°	426.2	419.1	414.8	403.9	401.6
35°	407.2	400.6	395.4	384.5	382.1
37.5°	388.8	382.1	376.0	365.1	362.7
40°	368.4	362.2	356.1	345.2	342.8
42.5°	348.5	343.3	336.7	326.3	323.9
45°	328.6	323.4	316.3	306.8	304.0
47.5°	309.2	303.5	296.4	286.5	284.6
50°	287.4	283.6	276.5	267.5	265.6
52.5°	268.0	263.3	256.7	248.1	246.2
55°	247.7	243.9	236.3	228.7	226.8
57.5°	227.8	224.0	216.9	209.8	207.9
60°	207.9	203.6	197.0	190.8	188.9
62.5°	187.0	183.7	177.1	171.4	170.0
65°	166.7	163.8	157.7	152.5	151.5
67.5°	146.3	143.0	138.3	134.0	132.1
70°	126.0	123.1	117.4	114.1	112.7
72.5°	105.6	102.3	99.0	96.6	95.7
75°	85.7	82.9	80.5	78.6	78.1
77.5°	67.2	64.9	63.0	62.0	61.6
80°	49.2	48.3	46.9	46.4	46.4
82.5°	33.6	33.1	32.7	32.2	32.2
85°	20.8	20.4	19.9	19.9	19.4
87.5°	9.9	9.5	9.9	9.5	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)