

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: P231689

Luminaire Tested: **S124-DR-LO-35-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231689
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-35-X-0048-1-U-DD-1-W
Description: DEFINE 4 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1437.3 lumens
Efficiency: N/A
Efficacy: 105.7 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

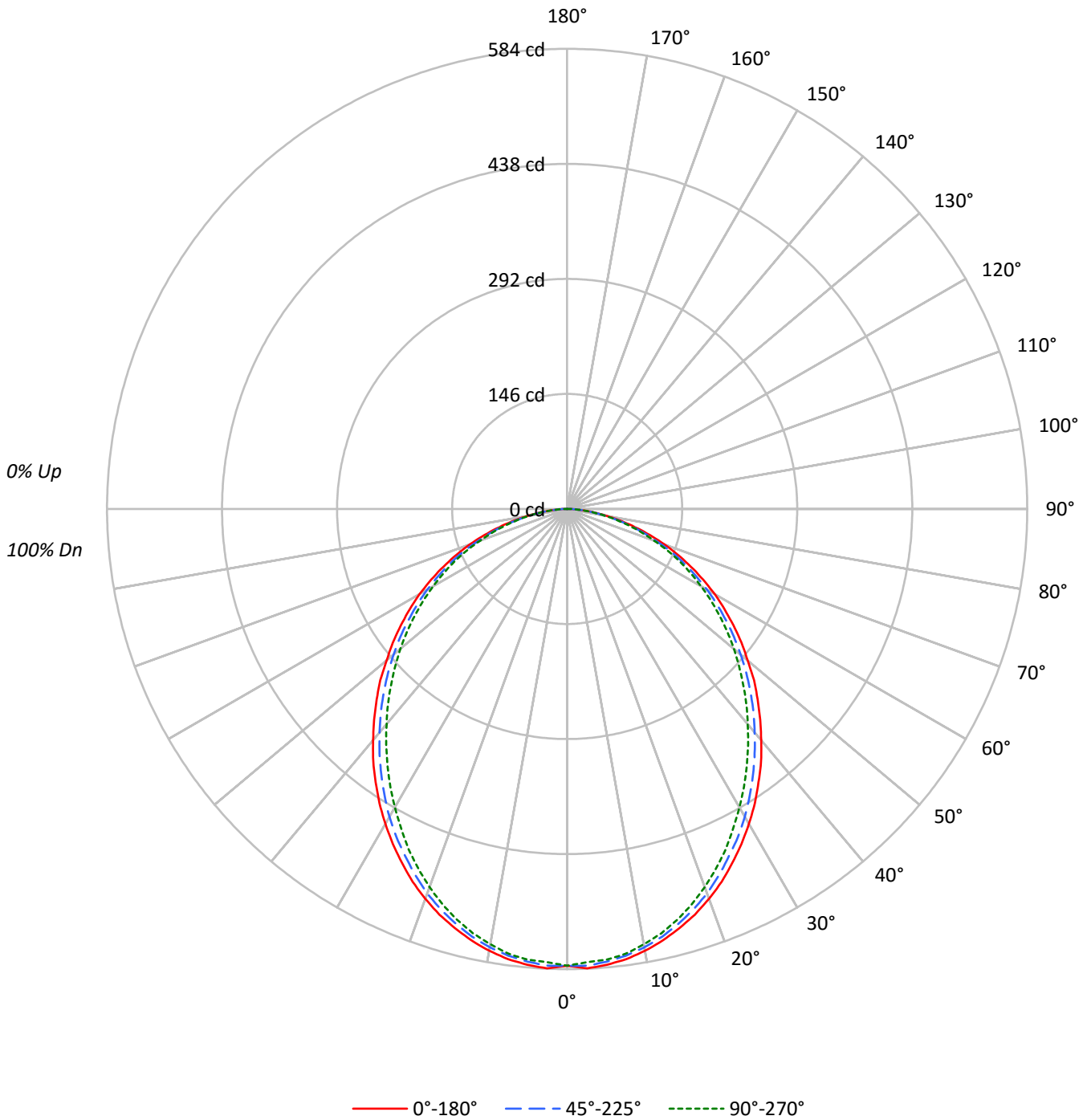
Input Watts (W): 13.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5194	5194	5194
5°	5222	5187	5165
10°	5180	5140	5104
15°	5108	5058	5007
20°	5020	4950	4870
25°	4903	4806	4708
30°	4774	4667	4525
35°	4633	4498	4347
40°	4481	4331	4170
45°	4331	4169	4007
50°	4167	4009	3852
55°	4024	3838	3685
60°	3875	3672	3522
65°	3674	3477	3342
70°	3432	3199	3071
75°	3085	2898	2815
80°	2642	2518	2492
85°	2231	2128	2077



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.6	3.8
10°-20°	153.1	10.7
20°-30°	223.1	15.5
30°-40°	256.2	17.8
40°-50°	253.4	17.6
50°-60°	220.1	15.3
60°-70°	162.7	11.3
70°-80°	89.7	6.2
80°-90°	24.4	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°	430.8	30.0
0°-40°	687.0	47.8
0°-60°	1160.5	80.7
0°-90°	1437.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1437.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	580	580	580	580	580	
5°	581	574	577	575	574	55
15°	551	544	545	541	540	155
25°	496	489	486	477	476	228
35°	424	417	411	400	397	265
45°	342	336	329	319	316	264
55°	258	254	246	238	236	230
65°	173	170	164	159	158	172
75°	89	86	84	82	81	95
85°	22	21	21	21	20	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	579.6	579.6	579.6	579.6	579.6
2.5°	583.6	577.7	580.1	578.7	575.7
5°	580.6	574.2	576.7	574.7	574.2
7.5°	576.2	569.8	571.8	569.3	569.3
10°	569.3	562.9	564.9	561.4	560.9
12.5°	560.9	554.0	556.0	551.6	551.6
15°	550.6	544.2	545.2	540.7	539.7
17.5°	539.7	532.4	532.9	527.4	526.0
20°	526.4	519.1	519.1	511.7	510.7
22.5°	512.2	504.8	503.3	494.9	493.9
25°	495.9	489.0	486.1	477.2	476.2
27.5°	479.2	472.3	469.3	459.0	456.5
30°	461.4	454.1	451.1	439.3	437.3
32.5°	443.2	435.8	431.4	420.1	417.6
35°	423.5	416.6	411.2	399.9	397.4
37.5°	404.3	397.4	391.0	379.7	377.2
40°	383.1	376.7	370.3	359.0	356.5
42.5°	362.5	357.0	350.1	339.3	336.8
45°	341.8	336.4	329.0	319.1	316.2
47.5°	321.6	315.7	308.3	297.9	296.0
50°	298.9	295.0	287.6	278.2	276.3
52.5°	278.7	273.8	266.9	258.1	256.1
55°	257.6	253.6	245.7	237.9	235.9
57.5°	236.9	232.9	225.6	218.2	216.2
60°	216.2	211.8	204.9	198.5	196.5
62.5°	194.5	191.1	184.2	178.3	176.8
65°	173.3	170.4	164.0	158.6	157.6
67.5°	152.2	148.7	143.8	139.4	137.4
70°	131.0	128.0	122.1	118.7	117.2
72.5°	109.8	106.4	102.9	100.5	99.5
75°	89.1	86.2	83.7	81.7	81.3
77.5°	69.9	67.5	65.5	64.5	64.0
80°	51.2	50.2	48.8	48.3	48.3
82.5°	35.0	34.5	34.0	33.5	33.5
85°	21.7	21.2	20.7	20.7	20.2
87.5°	10.3	9.8	10.3	9.8	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)