

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: P231692

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231692
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-1-30-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: 2806.2 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.13 / 1.27
Luminous Opening: Rectangular (W 0.31' x L: 3.92' x H: 0')
CIE Type: Direct

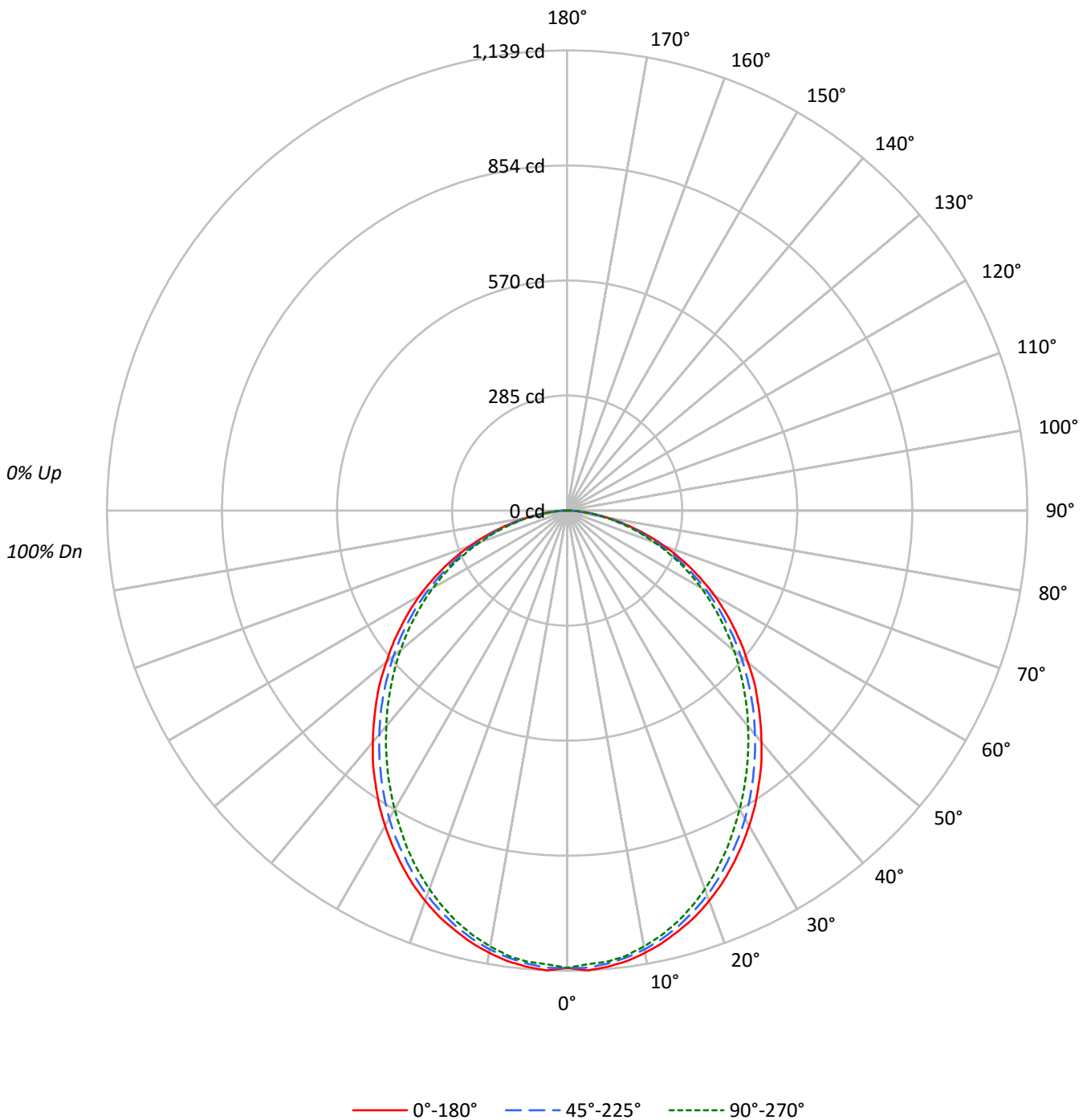
Input Watts (W): 27.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	10141	10141	10141
5°	10197	10128	10085
10°	10113	10035	9965
15°	9972	9874	9776
20°	9802	9664	9508
25°	9573	9383	9193
30°	9322	9113	8834
35°	9045	8783	8489
40°	8751	8458	8144
45°	8456	8139	7823
50°	8137	7827	7519
55°	7856	7496	7196
60°	7565	7168	6876
65°	7177	6789	6524
70°	6702	6248	5994
75°	6024	5661	5494
80°	5160	4913	4861
85°	4349	4154	4051



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.6	3.8
10°-20°	298.9	10.7
20°-30°	435.6	15.5
30°-40°	500.2	17.8
40°-50°	494.7	17.6
50°-60°	429.8	15.3
60°-70°	317.8	11.3
70°-80°	175.1	6.2
80°-90°	47.6	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°	841.1	30.0
0°-40°	1341.3	47.8
0°-60°	2265.8	80.7
0°-90°	2806.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2806.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1132	1132	1132	1132	1132	
5°	1134	1121	1126	1122	1121	108
15°	1075	1062	1064	1056	1054	303
25°	968	955	949	932	930	446
35°	827	814	803	781	776	517
45°	667	657	642	623	617	515
55°	503	495	480	464	461	450
65°	338	333	320	310	308	335
75°	174	168	164	160	159	185
85°	42	41	40	40	39	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1131.7	1131.7	1131.7	1131.7	1131.7
2.5°	1139.4	1127.9	1132.7	1129.8	1124.0
5°	1133.7	1121.2	1126.0	1122.1	1121.2
7.5°	1125.0	1112.5	1116.3	1111.5	1111.5
10°	1111.5	1099.0	1102.9	1096.2	1095.2
12.5°	1095.2	1081.7	1085.6	1076.9	1076.9
15°	1075.0	1062.5	1064.4	1055.8	1053.8
17.5°	1053.8	1039.4	1040.4	1029.8	1026.9
20°	1027.9	1013.5	1013.5	999.0	997.1
22.5°	1000.0	985.6	982.7	966.3	964.4
25°	968.3	954.8	949.0	931.7	929.8
27.5°	935.6	922.1	916.3	896.2	891.3
30°	901.0	886.5	880.8	857.7	853.8
32.5°	865.4	851.0	842.3	820.2	815.4
35°	826.9	813.5	802.9	780.8	776.0
37.5°	789.4	776.0	763.5	741.3	736.5
40°	748.1	735.6	723.1	701.0	696.2
42.5°	707.7	697.1	683.7	662.5	657.7
45°	667.3	656.7	642.3	623.1	617.3
47.5°	627.9	616.3	601.9	581.7	577.9
50°	583.7	576.0	561.5	543.3	539.4
52.5°	544.2	534.6	521.2	503.8	500.0
55°	502.9	495.2	479.8	464.4	460.6
57.5°	462.5	454.8	440.4	426.0	422.1
60°	422.1	413.5	400.0	387.5	383.7
62.5°	379.8	373.1	359.6	348.1	345.2
65°	338.5	332.7	320.2	309.6	307.7
67.5°	297.1	290.4	280.8	272.1	268.3
70°	255.8	250.0	238.5	231.7	228.8
72.5°	214.4	207.7	201.0	196.2	194.2
75°	174.0	168.3	163.5	159.6	158.7
77.5°	136.5	131.7	127.9	126.0	125.0
80°	100.0	98.1	95.2	94.2	94.2
82.5°	68.3	67.3	66.3	65.4	65.4
85°	42.3	41.3	40.4	40.4	39.4
87.5°	20.2	19.2	20.2	19.2	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)