

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: P231694

Luminaire Tested: **S124-DR-1-40-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231694
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-1-40-X-0048-1-U-DD-1-W
Description: DEFINE 4 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2974.6 lumens
Efficiency: N/A
Efficacy: 106.6 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

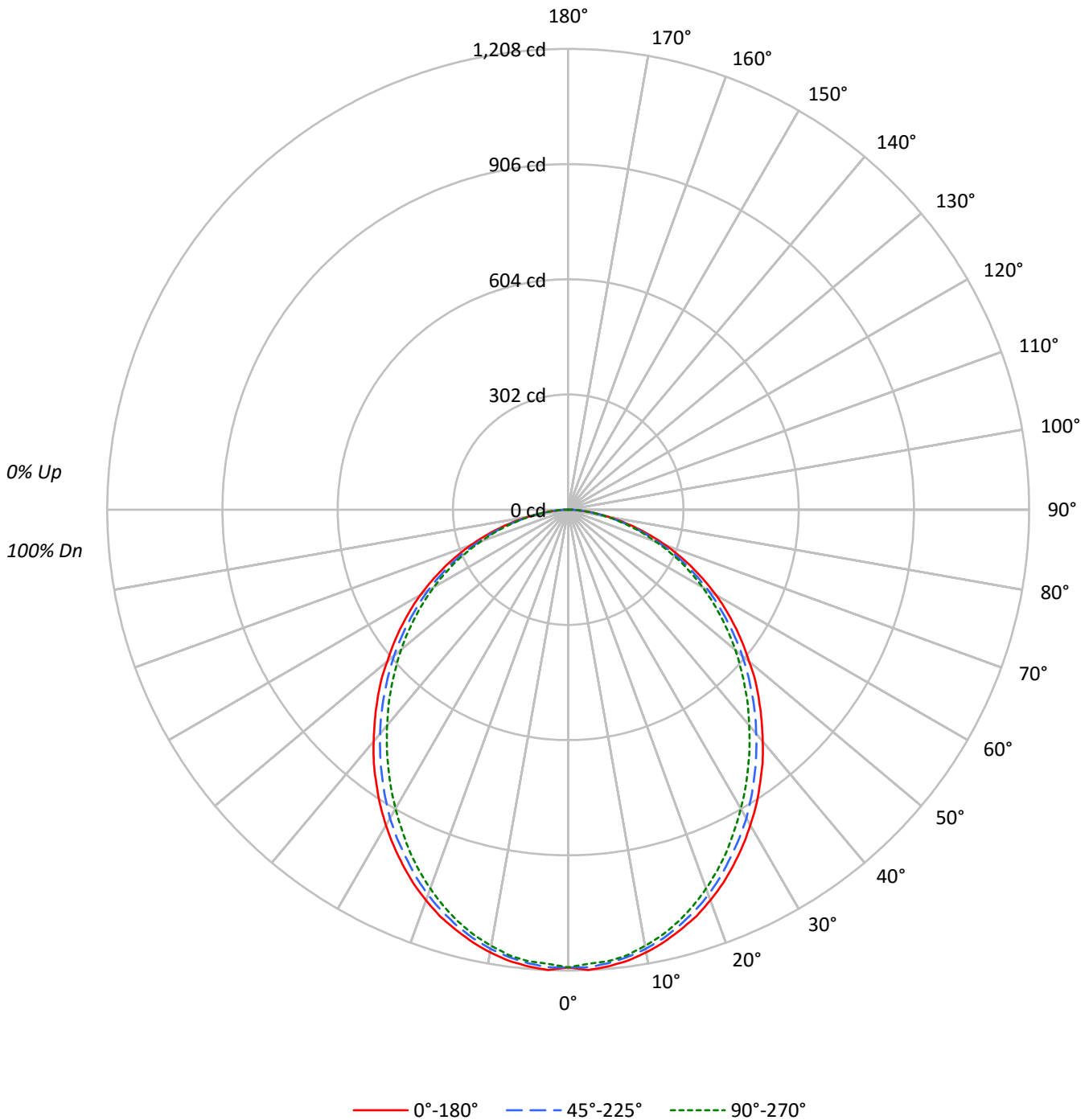
Input Watts (W): 27.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	10749	10749	10749
5°	10809	10735	10689
10°	10720	10637	10563
15°	10571	10467	10363
20°	10390	10244	10078
25°	10148	9946	9745
30°	9881	9660	9365
35°	9588	9310	8997
40°	9276	8966	8631
45°	8963	8627	8291
50°	8625	8297	7971
55°	8328	7946	7627
60°	8018	7599	7289
65°	7607	7196	6916
70°	7103	6623	6356
75°	6388	6000	5823
80°	5470	5207	5155
85°	4606	4400	4298



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.0	3.8
10°-20°	316.9	10.7
20°-30°	461.7	15.5
30°-40°	530.2	17.8
40°-50°	524.4	17.6
50°-60°	455.6	15.3
60°-70°	336.8	11.3
70°-80°	185.6	6.2
80°-90°	50.4	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°	891.6	30.0
0°-40°	1421.8	47.8
0°-60°	2401.7	80.7
0°-90°	2974.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2974.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1200	1200	1200	1200	1200	
5°	1202	1188	1194	1189	1188	114
15°	1140	1126	1128	1119	1117	321
25°	1026	1012	1006	988	986	473
35°	876	862	851	828	822	548
45°	707	696	681	660	654	546
55°	533	525	509	492	488	477
65°	359	353	339	328	326	355
75°	184	178	173	169	168	196
85°	45	44	43	43	42	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1199.6	1199.6	1199.6	1199.6	1199.6
2.5°	1207.8	1195.6	1200.7	1197.6	1191.5
5°	1201.7	1188.4	1193.5	1189.4	1188.4
7.5°	1192.5	1179.3	1183.3	1178.2	1178.2
10°	1178.2	1165.0	1169.1	1161.9	1160.9
12.5°	1160.9	1146.6	1150.7	1141.5	1141.5
15°	1139.5	1126.3	1128.3	1119.1	1117.1
17.5°	1117.1	1101.8	1102.8	1091.6	1088.5
20°	1089.6	1074.3	1074.3	1059.0	1056.9
22.5°	1060.0	1044.7	1041.7	1024.3	1022.3
25°	1026.4	1012.1	1006.0	987.6	985.6
27.5°	991.7	977.4	971.3	949.9	944.8
30°	955.0	939.7	933.6	909.2	905.1
32.5°	917.3	902.0	892.8	869.4	864.3
35°	876.5	862.3	851.1	827.6	822.5
37.5°	836.8	822.5	809.3	785.8	780.7
40°	793.0	779.7	766.5	743.0	737.9
42.5°	750.2	738.9	724.7	702.3	697.2
45°	707.3	696.1	680.8	660.5	654.3
47.5°	665.6	653.3	638.0	616.6	612.6
50°	618.7	610.5	595.2	575.9	571.8
52.5°	576.9	566.7	552.4	534.1	530.0
55°	533.1	524.9	508.6	492.3	488.2
57.5°	490.3	482.1	466.8	451.5	447.4
60°	447.4	438.3	424.0	410.8	406.7
62.5°	402.6	395.5	381.2	369.0	365.9
65°	358.8	352.7	339.4	328.2	326.2
67.5°	314.9	307.8	297.6	288.4	284.4
70°	271.1	265.0	252.8	245.6	242.6
72.5°	227.3	220.2	213.0	207.9	205.9
75°	184.5	178.4	173.3	169.2	168.2
77.5°	144.7	139.6	135.6	133.5	132.5
80°	106.0	104.0	100.9	99.9	99.9
82.5°	72.4	71.3	70.3	69.3	69.3
85°	44.8	43.8	42.8	42.8	41.8
87.5°	21.4	20.4	21.4	20.4	20.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)