

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: P231695

Luminaire Tested: **S124-DR-2-27-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231695
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-2-27-X-0048-1-U-DD-1-W
Description: DEFINE 4 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3192.0 lumens
Efficiency: N/A
Efficacy: 74.9 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

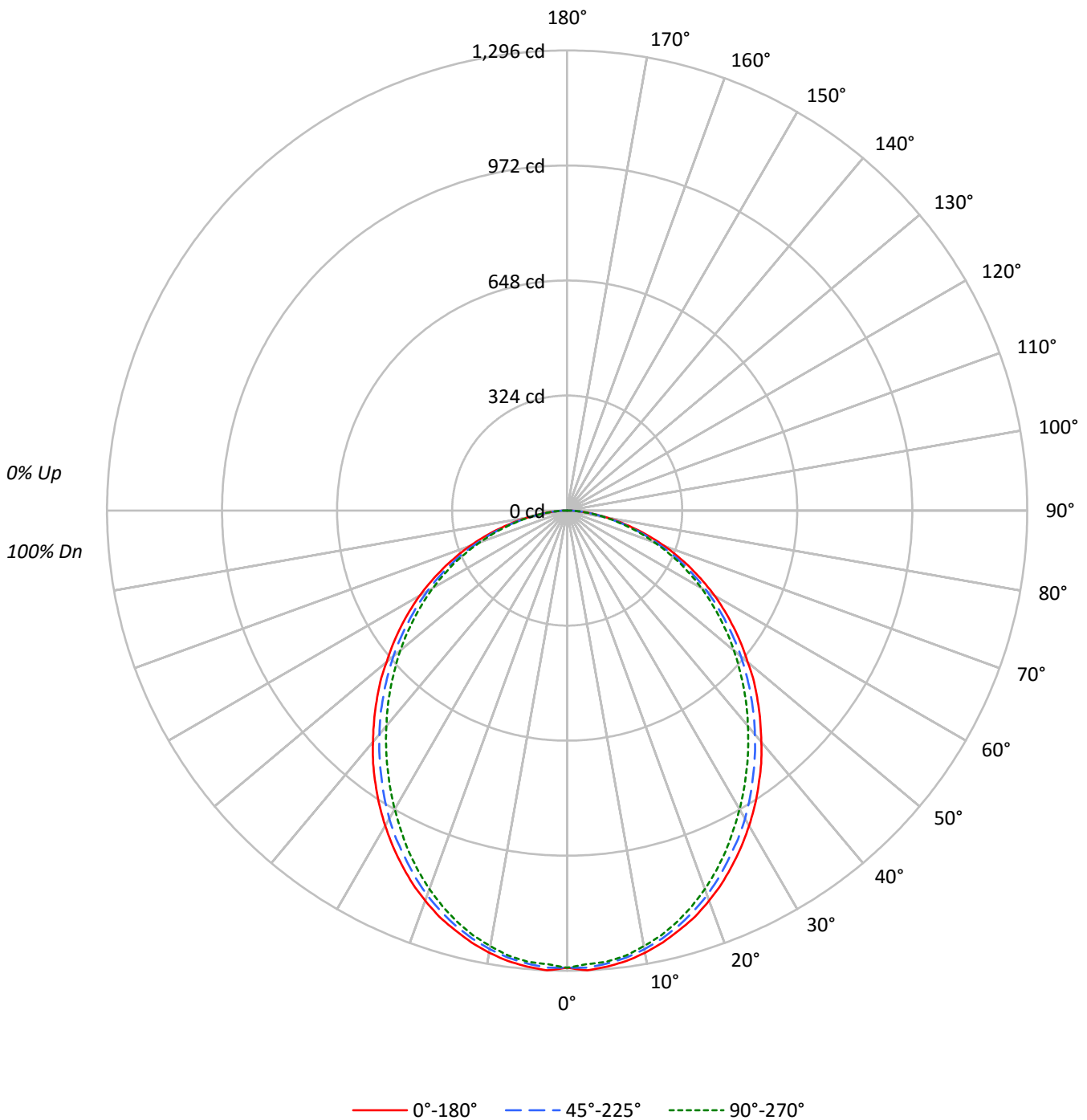
Input Watts (W): 42.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	11535	11535	11535
5°	11599	11520	11471
10°	11504	11414	11334
15°	11344	11232	11120
20°	11149	10993	10815
25°	10889	10673	10456
30°	10603	10365	10049
35°	10289	9990	9655
40°	9953	9621	9263
45°	9618	9258	8898
50°	9255	8904	8554
55°	8936	8527	8185
60°	8604	8154	7821
65°	8163	7722	7421
70°	7621	7105	6820
75°	6855	6436	6249
80°	5867	5588	5532
85°	4945	4719	4606



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.2	3.8
10°-20°	340.0	10.7
20°-30°	495.5	15.5
30°-40°	569.0	17.8
40°-50°	562.7	17.6
50°-60°	488.9	15.3
60°-70°	361.4	11.3
70°-80°	199.2	6.2
80°-90°	54.1	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°	956.7	30.0
0°-40°	1525.7	47.8
0°-60°	2577.3	80.7
0°-90°	3192.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3192.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1287	1287	1287	1287	1287	
5°	1290	1275	1281	1276	1275	122
15°	1223	1209	1211	1201	1199	345
25°	1101	1086	1080	1060	1058	507
35°	941	925	913	888	883	589
45°	759	747	731	709	702	586
55°	572	563	546	528	524	512
65°	385	378	364	352	350	381
75°	198	191	186	182	180	211
85°	48	47	46	46	45	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1287.3	1287.3	1287.3	1287.3	1287.3
2.5°	1296.1	1282.9	1288.4	1285.1	1278.6
5°	1289.5	1275.3	1280.7	1276.4	1275.3
7.5°	1279.7	1265.4	1269.8	1264.3	1264.3
10°	1264.3	1250.1	1254.5	1246.8	1245.7
12.5°	1245.7	1230.4	1234.8	1225.0	1225.0
15°	1222.8	1208.6	1210.8	1200.9	1198.7
17.5°	1198.7	1182.3	1183.4	1171.4	1168.1
20°	1169.2	1152.8	1152.8	1136.4	1134.2
22.5°	1137.5	1121.1	1117.8	1099.2	1097.0
25°	1101.4	1086.1	1079.5	1059.8	1057.6
27.5°	1064.2	1048.9	1042.3	1019.3	1013.9
30°	1024.8	1008.4	1001.8	975.6	971.2
32.5°	984.4	967.9	958.1	932.9	927.5
35°	940.6	925.3	913.3	888.1	882.6
37.5°	897.9	882.6	868.4	843.3	837.8
40°	850.9	836.7	822.5	797.3	791.9
42.5°	805.0	792.9	777.6	753.6	748.1
45°	759.0	747.0	730.6	708.7	702.2
47.5°	714.2	701.1	684.7	661.7	657.3
50°	663.9	655.1	638.7	618.0	613.6
52.5°	619.0	608.1	592.8	573.1	568.7
55°	572.0	563.3	545.8	528.3	523.9
57.5°	526.1	517.3	500.9	484.5	480.1
60°	480.1	470.3	455.0	440.8	436.4
62.5°	432.0	424.4	409.1	395.9	392.6
65°	385.0	378.4	364.2	352.2	350.0
67.5°	338.0	330.3	319.4	309.5	305.1
70°	290.9	284.4	271.2	263.6	260.3
72.5°	243.9	236.2	228.6	223.1	220.9
75°	198.0	191.4	185.9	181.6	180.5
77.5°	155.3	149.8	145.5	143.3	142.2
80°	113.7	111.6	108.3	107.2	107.2
82.5°	77.7	76.6	75.5	74.4	74.4
85°	48.1	47.0	45.9	45.9	44.8
87.5°	23.0	21.9	23.0	21.9	21.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)