

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: P231663

Luminaire Tested: **S122-DR-LO-27-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231663
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33909)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122-DR-LO-27-X-0048-1-U-DD-1-W
Description: DEFINE 2 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: 991.2 lumens
Efficiency: N/A
Efficacy: 72.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.14' x L: 3.92' x H: 0')
CIE Type: Direct

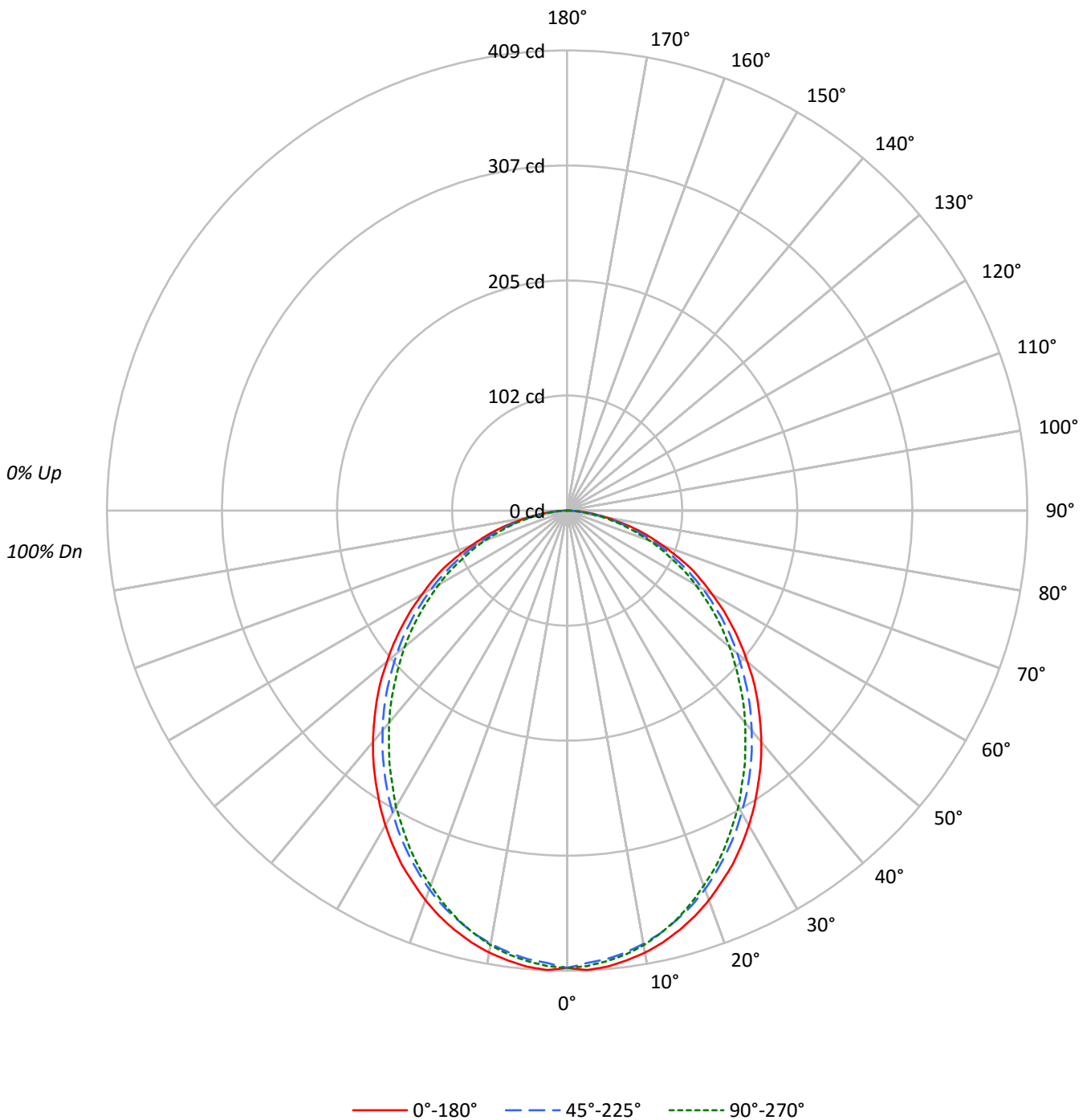
Input Watts (W): 13.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P231663

CATALOG NUMBER: S122-DR-LO-27-X-0048-1-U-DD-1-W

Luminous Intensity Polar Plot





TEST NUMBER: P231663

CATALOG NUMBER: S122-DR-LO-27-X-0048-1-U-DD-1-W

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	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	65	56	49	75	63	55	49	61	54	48	59	53	48	58	52	47	45
6	71	58	50	43	69	57	49	43	56	48	43	54	47	42	52	46	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29
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°	7980	7980	7980
5°	8020	7888	7921
10°	7951	7792	7818
15°	7845	7653	7643
20°	7698	7485	7410
25°	7527	7267	7169
30°	7321	7027	6895
35°	7098	6787	6595
40°	6880	6537	6306
45°	6646	6288	6016
50°	6386	6028	5757
55°	6130	5763	5472
60°	5842	5473	5174
65°	5625	5165	4812
70°	5154	4769	4460
75°	4740	4270	3967
80°	4036	3685	3437
85°	3311	2928	2613



TEST NUMBER: P231663

CATALOG NUMBER: S122-DR-LO-27-X-0048-1-U-DD-1-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.2	3.9
10°-20°	106.8	10.8
20°-30°	155.4	15.7
30°-40°	178.0	18.0
40°-50°	175.3	17.7
50°-60°	151.2	15.3
60°-70°	110.5	11.1
70°-80°	60.3	6.1
80°-90°	15.4	1.6
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°	300.4	30.3
0°-40°	478.5	48.3
0°-60°	805.0	81.2
0°-90°	991.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	991.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	407	405	400	403	402	39
15°	386	382	377	378	376	109
25°	348	343	336	334	331	160
35°	296	292	283	278	275	185
45°	239	234	226	220	217	185
55°	179	176	168	162	160	160
65°	121	117	111	106	104	119
75°	62	59	56	54	52	66
85°	15	14	13	12	12	17
90°	0	0	0	0	0	



TEST NUMBER: P231663

CATALOG NUMBER: S122-DR-LO-27-X-0048-1-U-DD-1-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	406.5	406.5	406.5	406.5	406.5
2.5°	408.7	407.0	402.5	406.1	405.2
5°	407.0	404.7	400.3	402.9	402.0
7.5°	403.4	401.2	396.2	398.9	398.0
10°	398.9	395.8	390.9	393.1	392.2
12.5°	393.1	389.5	384.6	386.4	384.6
15°	386.0	382.4	376.6	377.5	376.1
17.5°	377.9	373.9	368.1	368.1	365.9
20°	368.5	364.5	358.3	356.9	354.7
22.5°	357.8	353.8	347.1	346.2	343.5
25°	347.5	343.1	335.5	333.7	331.0
27.5°	335.5	331.0	323.4	319.9	317.2
30°	323.0	318.1	310.0	306.9	304.2
32.5°	310.0	305.6	297.1	292.6	289.0
35°	296.2	291.7	283.2	277.9	275.2
37.5°	282.8	277.4	269.4	263.6	260.0
40°	268.5	263.1	255.1	249.3	246.1
42.5°	253.7	248.8	241.2	234.5	231.8
45°	239.4	234.5	226.5	220.2	216.7
47.5°	224.7	219.8	211.7	205.0	202.4
50°	209.1	205.5	197.4	190.7	188.5
52.5°	194.3	190.7	183.2	176.5	174.2
55°	179.1	176.5	168.4	162.2	159.9
57.5°	164.4	161.3	153.7	148.3	145.2
60°	148.8	146.1	139.4	134.0	131.8
62.5°	134.9	131.8	125.1	120.2	118.4
65°	121.1	117.0	111.2	106.3	103.6
67.5°	105.0	102.7	96.9	92.0	91.1
70°	89.8	87.6	83.1	79.1	77.7
72.5°	76.4	73.7	69.2	66.1	64.3
75°	62.5	59.4	56.3	53.6	52.3
77.5°	48.2	46.9	43.8	41.5	40.7
80°	35.7	34.8	32.6	30.4	30.4
82.5°	25.0	23.7	21.9	20.5	20.1
85°	14.7	13.8	13.0	12.1	11.6
87.5°	6.3	5.8	4.9	4.5	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)