

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: P231667

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231667
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-1-27-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

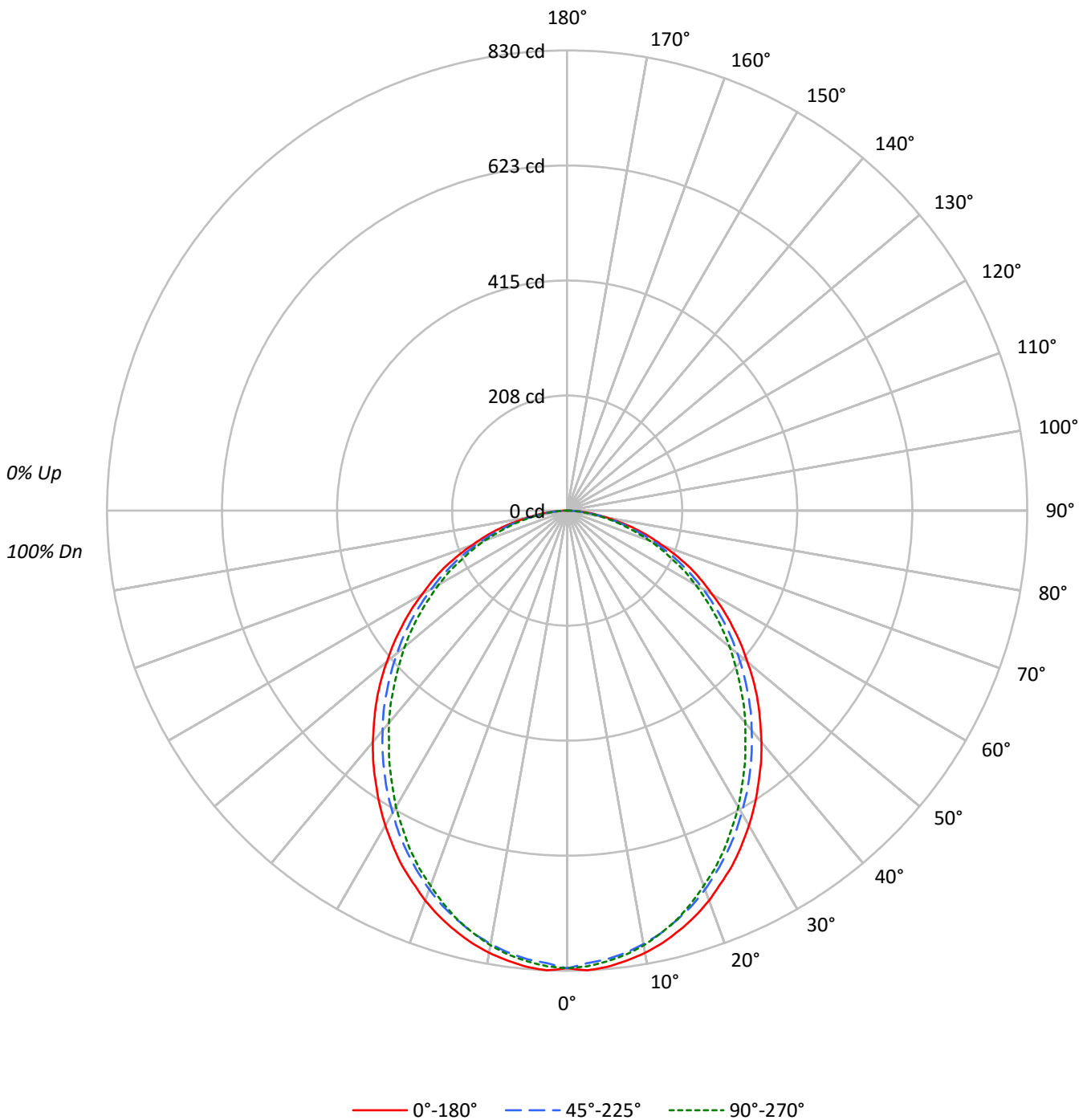
Lumens per Lamp: N/A
Luminaire Lumens: 2012.7 lumens
Efficiency: N/A
Efficacy: 72.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.14' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 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



TEST NUMBER: P231667
CATALOG NUMBER: S122-DR-1-27-X-0048-1-U-DD-1-W

Luminous Intensity Polar Plot





TEST NUMBER: P231667

CATALOG NUMBER: S122-DR-1-27-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°	16205	16205	16205
5°	16284	16016	16087
10°	16146	15821	15875
15°	15927	15541	15522
20°	15634	15197	15045
25°	15285	14754	14559
30°	14865	14269	14001
35°	14412	13782	13391
40°	13971	13274	12807
45°	13497	12767	12212
50°	12964	12243	11690
55°	12447	11705	11113
60°	11860	11111	10506
65°	11417	10493	9773
70°	10463	9682	9057
75°	9632	8669	8047
80°	8207	7484	6975
85°	6734	5924	5315



TEST NUMBER: P231667

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.5	3.9
10°-20°	216.9	10.8
20°-30°	315.6	15.7
30°-40°	361.5	18.0
40°-50°	356.1	17.7
50°-60°	307.0	15.3
60°-70°	224.4	11.1
70°-80°	122.5	6.1
80°-90°	31.3	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°	610.1	30.3
0°-40°	971.5	48.3
0°-60°	1634.6	81.2
0°-90°	2012.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2012.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	826	826	826	826	826	
5°	826	822	813	818	816	78
15°	784	776	765	766	764	221
25°	706	697	681	678	672	325
35°	601	592	575	564	559	376
45°	486	476	460	447	440	375
55°	364	358	342	329	325	325
65°	246	238	226	216	210	241
75°	127	121	114	109	106	134
85°	30	28	26	24	24	35
90°	0	0	0	0	0	



TEST NUMBER: P231667

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	825.5	825.5	825.5	825.5	825.5
2.5°	830.0	826.4	817.3	824.6	822.7
5°	826.4	821.8	812.8	818.2	816.4
7.5°	819.1	814.6	804.6	810.0	808.2
10°	810.0	803.7	793.7	798.2	796.4
12.5°	798.2	791.0	781.0	784.6	781.0
15°	783.7	776.5	764.7	766.5	763.8
17.5°	767.4	759.2	747.5	747.5	742.9
20°	748.4	740.2	727.5	724.8	720.2
22.5°	726.6	718.4	704.8	703.0	697.6
25°	705.7	696.7	681.2	677.6	672.2
27.5°	681.2	672.2	656.7	649.5	644.0
30°	655.8	645.9	629.5	623.2	617.7
32.5°	629.5	620.5	603.2	594.2	586.9
35°	601.4	592.3	575.1	564.2	558.8
37.5°	574.2	563.3	547.0	535.2	527.9
40°	545.2	534.3	518.0	506.2	499.8
42.5°	515.2	505.3	489.8	476.2	470.8
45°	486.2	476.2	459.9	447.2	439.9
47.5°	456.3	446.3	430.0	416.4	410.9
50°	424.5	417.3	400.9	387.3	382.8
52.5°	394.6	387.3	371.9	358.3	353.8
55°	363.7	358.3	342.0	329.3	324.7
57.5°	333.8	327.5	312.0	301.2	294.8
60°	302.1	296.6	283.0	272.1	267.6
62.5°	273.9	267.6	254.0	244.0	240.4
65°	245.8	237.7	225.9	215.9	210.4
67.5°	213.2	208.6	196.8	186.9	185.0
70°	182.3	177.8	168.7	160.6	157.8
72.5°	155.1	149.7	140.6	134.3	130.6
75°	127.0	120.6	114.3	108.9	106.1
77.5°	98.0	95.2	88.9	84.4	82.5
80°	72.6	70.8	66.2	61.7	61.7
82.5°	50.8	48.1	44.4	41.7	40.8
85°	29.9	28.1	26.3	24.5	23.6
87.5°	12.7	11.8	10.0	9.1	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)