

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: P231724

Luminaire Tested: **S122-RDR-LO-30-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231724
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33911)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122-RDR-LO-30-X-0048-1-U-DD-1-W
Description: DEFINE 2 LED LINEAR REGRESSED 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: 1079.2 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.14' x L: 3.92' x H: 0')
CIE Type: Direct

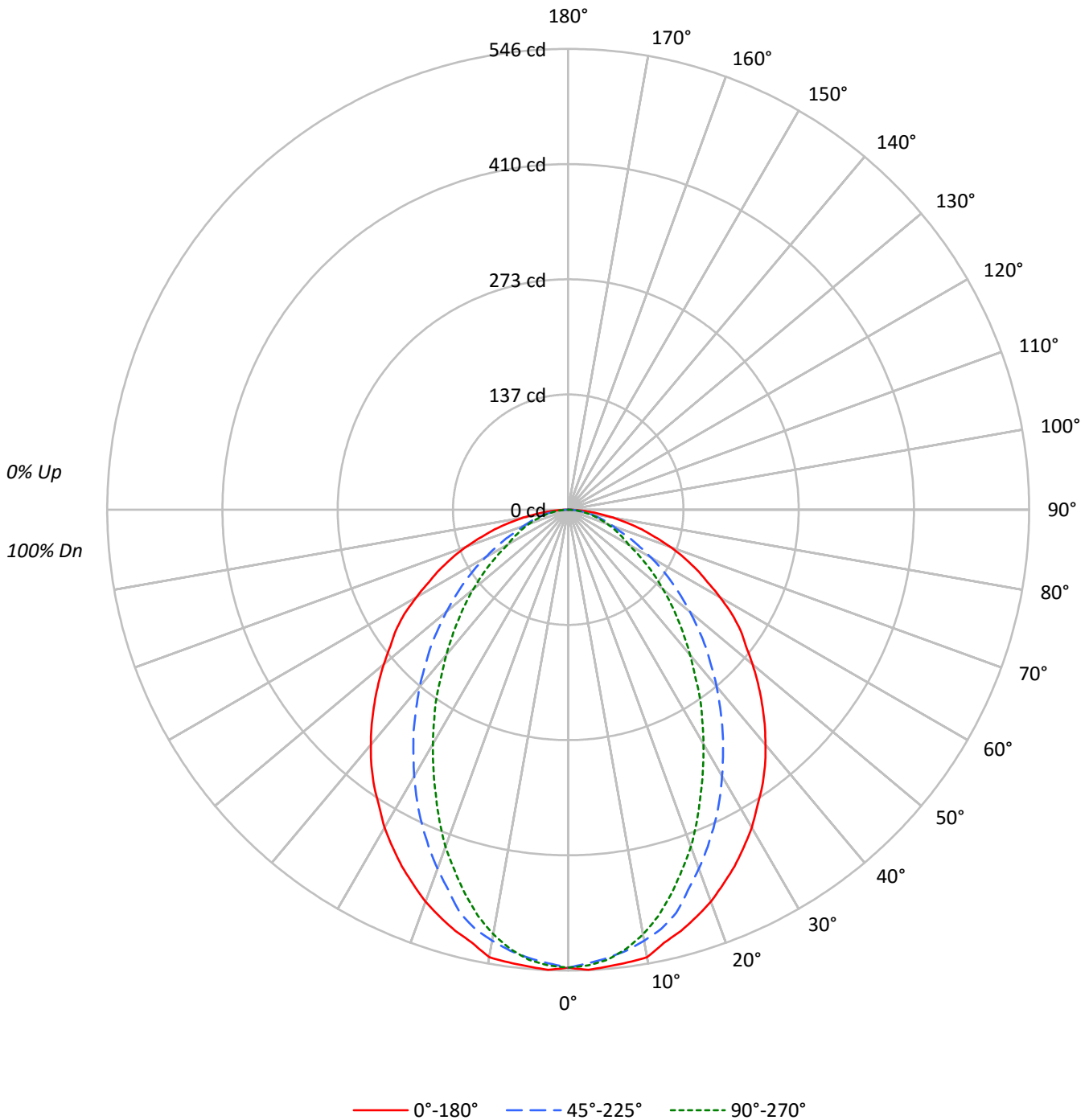
Input Watts (W): 13.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	67	62	58	56
5	79	67	59	53	77	66	59	53	64	57	52	62	56	52	61	55	51	49
6	74	61	53	47	72	60	52	47	59	52	46	57	51	46	55	50	46	44
7	69	56	48	42	67	55	47	42	54	47	42	52	46	41	51	45	41	39
8	64	51	43	38	63	51	43	38	49	43	38	48	42	37	47	41	37	35
9	60	48	40	34	59	47	39	34	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10651	10651	10651
5°	10702	10507	10548
10°	10732	10337	10182
15°	10497	10054	9578
20°	10324	9455	8878
25°	10095	8889	8044
30°	9858	8264	7262
35°	9598	7642	6521
40°	9317	7011	5758
45°	9011	6396	5097
50°	8707	5750	4480
55°	8529	5127	3881
60°	8150	4452	3247
65°	7803	3767	3042
70°	7404	3197	2835
75°	6826	2958	2601
80°	6059	2645	2351
85°	5158	2342	2117



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.8	4.7
10°-20°	138.6	12.8
20°-30°	191.1	17.7
30°-40°	204.4	18.9
40°-50°	186.4	17.3
50°-60°	146.9	13.6
60°-70°	96.8	9.0
70°-80°	50.5	4.7
80°-90°	13.6	1.3
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°	380.6	35.3
0°-40°	585.0	54.2
0°-60°	918.3	85.1
0°-90°	1079.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1079.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	543	543	543	543	543	
5°	543	540	533	537	535	52
15°	516	509	495	480	471	146
25°	466	448	410	384	371	215
35°	400	370	319	284	272	250
45°	325	287	230	195	184	251
55°	249	204	150	122	113	222
65°	168	124	81	67	66	166
75°	90	53	39	35	34	95
85°	23	11	10	10	9	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	542.6	542.6	542.6	542.6	542.6
2.5°	545.7	543.1	537.9	542.0	540.5
5°	543.1	540.0	533.2	537.3	535.3
7.5°	541.0	536.3	526.9	528.5	524.9
10°	538.4	532.7	518.6	515.0	510.8
12.5°	525.4	522.3	508.7	498.3	493.1
15°	516.5	508.7	494.7	479.6	471.3
17.5°	505.6	496.8	472.3	457.8	447.9
20°	494.2	481.7	452.6	436.4	425.0
22.5°	480.1	466.6	431.8	411.5	398.5
25°	466.1	448.4	410.4	384.4	371.4
27.5°	450.5	430.2	388.1	359.4	345.9
30°	434.9	410.9	364.6	333.4	320.4
32.5°	416.7	391.2	341.2	306.9	295.5
35°	400.5	370.4	318.9	283.5	272.1
37.5°	382.9	350.1	295.5	259.6	246.0
40°	363.6	328.8	273.6	237.2	224.7
42.5°	344.4	307.9	250.7	214.3	203.4
45°	324.6	286.6	230.4	195.1	183.6
47.5°	304.8	266.3	208.6	175.3	164.9
50°	285.1	245.5	188.3	157.1	146.7
52.5°	265.3	224.7	168.5	138.9	130.0
55°	249.2	203.9	149.8	122.2	113.4
57.5°	229.9	184.1	131.6	106.1	97.3
60°	207.6	163.3	113.4	89.0	82.7
62.5°	186.2	144.1	96.2	76.5	73.9
65°	168.0	124.3	81.1	67.1	65.5
67.5°	148.3	105.6	65.5	58.8	57.2
70°	129.0	87.4	55.7	50.5	49.4
72.5°	107.7	69.2	47.3	42.7	41.6
75°	90.0	53.1	39.0	35.4	34.3
77.5°	70.7	38.5	30.7	28.1	27.6
80°	53.6	28.1	23.4	21.8	20.8
82.5°	35.9	19.2	16.1	15.6	15.1
85°	22.9	11.4	10.4	9.9	9.4
87.5°	9.4	5.2	4.7	4.2	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)