

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: P231734

Luminaire Tested: **S122-RDR-2-40-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231734
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-2-40-X-0048-1-U-DD-1-W
Description: DEFINE 2 LED LINEAR REGRESSED 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: 3291.6 lumens
Efficiency: N/A
Efficacy: 77.3 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

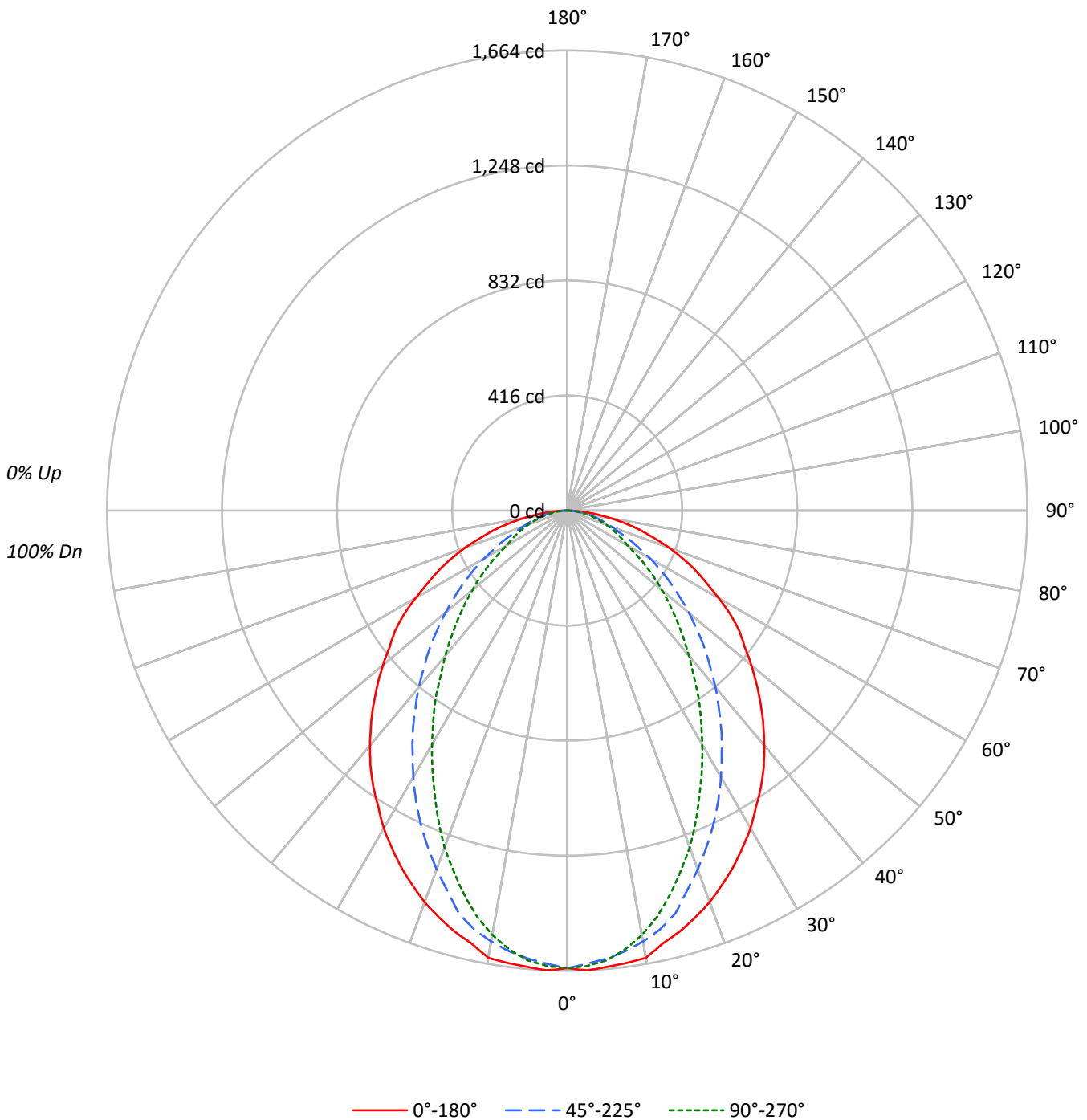
Input Watts (W): 42.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	100	100	100	100	100	100		
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	86	86	86	86	86		
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74	74	74	74	74	74	74		
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	69	66	64	64	64	64	64	64	64		
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	67	62	58	56	56	56	56	56	56	56		
5	79	67	59	53	77	66	59	53	64	57	52	62	56	52	61	55	51	49	49	49	49	49	49	49		
6	74	61	53	47	72	60	52	47	59	52	46	57	51	46	55	50	46	44	44	44	44	44	44	44		
7	69	56	48	42	67	55	47	42	54	47	42	52	46	41	51	45	41	39	39	39	39	39	39	39		
8	64	51	43	38	63	51	43	38	49	43	38	48	42	37	47	41	37	35	35	35	35	35	35	35		
9	60	48	40	34	59	47	39	34	46	39	34	45	39	34	44	38	34	32	32	32	32	32	32	32		
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	29	29	29	29	29	29	29		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	32484	32484	32484
5°	32639	32044	32170
10°	32732	31530	31055
15°	32016	30663	29212
20°	31485	28834	27077
25°	30791	27113	24536
30°	30065	25210	22152
35°	29274	23307	19885
40°	28418	21384	17564
45°	27484	19511	15549
50°	26551	17539	13663
55°	26010	15637	11838
60°	24852	13580	9905
65°	23805	11496	9285
70°	22585	9746	8649
75°	20819	9026	7941
80°	18472	8071	7178
85°	15721	7140	6442



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.0	4.7
10°-20°	422.9	12.8
20°-30°	582.8	17.7
30°-40°	623.5	18.9
40°-50°	568.5	17.3
50°-60°	448.1	13.6
60°-70°	295.2	9.0
70°-80°	154.1	4.7
80°-90°	41.6	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°	1160.7	35.3
0°-40°	1784.2	54.2
0°-60°	2800.8	85.1
0°-90°	3291.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3291.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1655	1655	1655	1655	1655	
5°	1656	1647	1626	1639	1633	158
15°	1575	1552	1509	1463	1437	444
25°	1422	1368	1252	1172	1133	654
35°	1222	1130	973	865	830	763
45°	990	874	703	595	560	764
55°	760	622	457	373	346	676
65°	512	379	248	205	200	506
75°	274	162	119	108	105	289
85°	70	35	32	30	29	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1654.8	1654.8	1654.8	1654.8	1654.8
2.5°	1664.3	1656.4	1640.5	1653.2	1648.4
5°	1656.4	1646.8	1626.2	1638.9	1632.6
7.5°	1650.0	1635.7	1607.2	1611.9	1600.8
10°	1642.1	1624.6	1581.8	1570.7	1558.0
12.5°	1602.4	1592.9	1551.6	1519.9	1504.1
15°	1575.4	1551.6	1508.8	1462.8	1437.4
17.5°	1542.1	1515.2	1440.6	1396.2	1366.0
20°	1507.2	1469.1	1380.3	1331.1	1296.2
22.5°	1464.4	1423.1	1316.8	1255.0	1215.3
25°	1421.6	1367.6	1251.8	1172.5	1132.8
27.5°	1374.0	1312.1	1183.6	1096.3	1055.1
30°	1326.4	1253.4	1112.2	1017.0	977.3
32.5°	1270.8	1193.1	1040.8	936.1	901.2
35°	1221.6	1129.6	972.6	864.7	829.8
37.5°	1167.7	1067.8	901.2	791.7	750.4
40°	1109.0	1002.7	834.5	723.5	685.4
42.5°	1050.3	939.2	764.7	653.7	620.3
45°	990.0	874.2	702.8	595.0	560.1
47.5°	929.7	812.3	636.2	534.7	502.9
50°	869.4	748.9	574.3	479.1	447.4
52.5°	809.1	685.4	514.0	423.6	396.6
55°	760.0	621.9	456.9	372.8	345.9
57.5°	701.3	561.6	401.4	323.7	296.7
60°	633.0	498.2	345.9	271.3	252.3
62.5°	568.0	439.5	293.5	233.2	225.3
65°	512.5	379.2	247.5	204.7	199.9
67.5°	452.2	322.1	199.9	179.3	174.5
70°	393.5	266.5	169.8	153.9	150.7
72.5°	328.4	211.0	144.4	130.1	126.9
75°	274.5	161.8	119.0	107.9	104.7
77.5°	215.8	117.4	93.6	85.7	84.1
80°	163.4	85.7	71.4	66.6	63.5
82.5°	109.5	58.7	49.2	47.6	46.0
85°	69.8	34.9	31.7	30.1	28.6
87.5°	28.6	15.9	14.3	12.7	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)