

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: P333889

Luminaire Tested: **S122RDW-S1005D835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333889  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122RDW-S1005D835-4F0-1E-UDD-F  
Description: DEFINE 2 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 1005 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3368.1 lumens  
Efficiency: N/A  
Efficacy: 81.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct

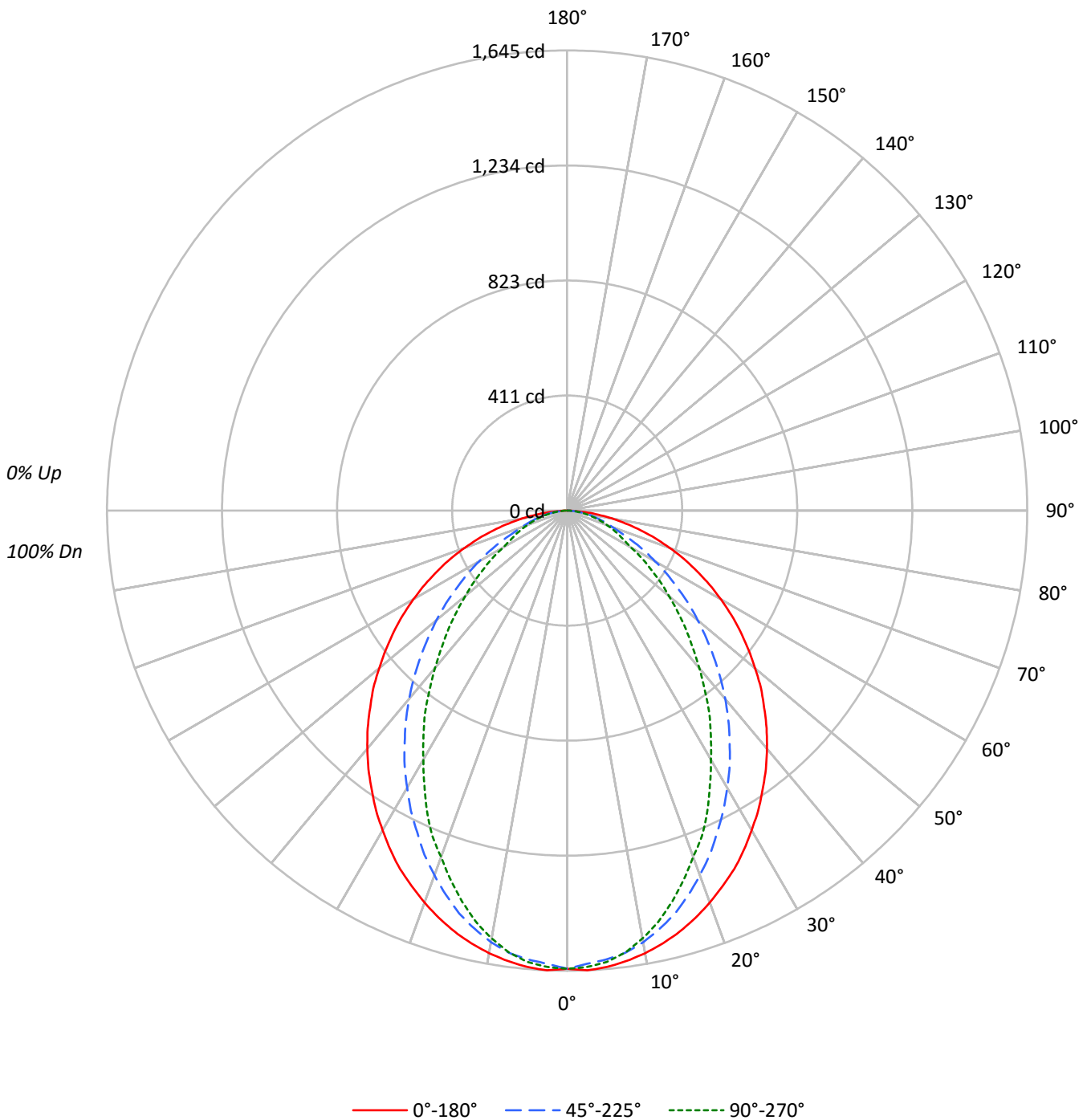
Input Watts (W): 41.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			
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	90	82	75	69	79	73	68	76	71	67	74	69	66					64				
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57					55				
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51					49				
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45					43				
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41					39				
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37					35				
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34					32				
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31					29				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	26442	26442	26442
5°	26543	26110	26255
10°	26340	25684	25465
15°	26038	24923	24204
20°	25618	23835	22639
25°	25189	22602	21123
30°	24591	21332	19177
35°	24013	19953	17469
40°	23429	18524	15494
45°	22742	16920	13705
50°	22039	15300	11949
55°	21318	13560	10263
60°	20483	11725	8519
65°	19534	9853	7755
70°	18401	8115	7138
75°	17012	7399	6656
80°	15016	6611	6062
85°	11801	5224	5224



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.5	4.6
10°-20°	421.4	12.5
20°-30°	591.6	17.6
30°-40°	644.8	19.1
40°-50°	592.7	17.6
50°-60°	465.5	13.8
60°-70°	303.0	9.0
70°-80°	156.0	4.6
80°-90°	39.8	1.2
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°	1166.4	34.6
0°-40°	1811.3	53.8
0°-60°	2869.4	85.2
0°-90°	3368.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3368.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1638	1638	1638	1638	1638	
5°	1638	1630	1611	1624	1620	155
15°	1558	1541	1491	1463	1448	439
25°	1414	1366	1269	1208	1186	650
35°	1218	1143	1012	919	886	763
45°	996	897	741	636	600	769
55°	757	642	482	393	365	677
65°	511	391	258	208	203	507
75°	273	169	119	108	107	288
85°	64	33	28	28	28	76
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1637.7	1637.7	1637.7	1637.7	1637.7
2.5°	1645.1	1637.7	1621.4	1636.2	1633.2
5°	1637.7	1630.3	1611.0	1624.4	1619.9
7.5°	1624.4	1615.5	1594.7	1600.6	1593.2
10°	1606.6	1596.2	1566.6	1562.1	1553.2
12.5°	1584.3	1571.0	1531.0	1522.1	1505.8
15°	1557.7	1541.4	1491.0	1462.8	1448.0
17.5°	1526.5	1502.8	1440.6	1408.0	1384.3
20°	1491.0	1461.3	1387.2	1350.2	1317.6
22.5°	1452.4	1418.3	1332.4	1282.0	1259.8
25°	1413.9	1366.5	1268.7	1207.9	1185.7
27.5°	1368.0	1317.6	1209.4	1139.7	1105.6
30°	1319.0	1262.7	1144.2	1068.6	1028.6
32.5°	1271.6	1203.4	1081.9	993.0	955.9
35°	1218.3	1142.7	1012.3	918.9	886.3
37.5°	1166.4	1084.9	947.0	844.8	807.7
40°	1111.6	1022.6	878.9	773.6	735.1
42.5°	1055.2	960.4	810.7	701.0	664.0
45°	996.0	896.7	741.0	635.8	600.2
47.5°	939.6	834.4	674.3	569.1	536.5
50°	877.4	772.2	609.1	506.9	475.7
52.5°	816.6	705.5	546.9	449.1	420.9
55°	757.3	641.7	481.7	392.7	364.6
57.5°	696.6	578.0	423.9	340.9	317.2
60°	634.3	515.8	363.1	287.5	263.8
62.5°	573.6	455.0	311.2	240.1	228.2
65°	511.3	391.3	257.9	207.5	203.0
67.5°	452.0	332.0	207.5	182.3	177.8
70°	389.8	274.2	171.9	157.1	151.2
72.5°	330.5	220.8	143.8	131.9	128.9
75°	272.7	169.0	118.6	108.2	106.7
77.5°	214.9	120.0	93.4	87.4	84.5
80°	161.5	86.0	71.1	65.2	65.2
82.5°	112.6	57.8	48.9	45.9	45.9
85°	63.7	32.6	28.2	28.2	28.2
87.5°	23.7	11.9	11.9	10.4	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)