

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: P334239

Luminaire Tested: **S124RDW-S1195D835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334239  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124RDW-S1195D835-4F0-1E-UDD-F  
Description: DEFINE 4 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 1195 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4472.4 lumens  
Efficiency: N/A  
Efficacy: 108.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Direct

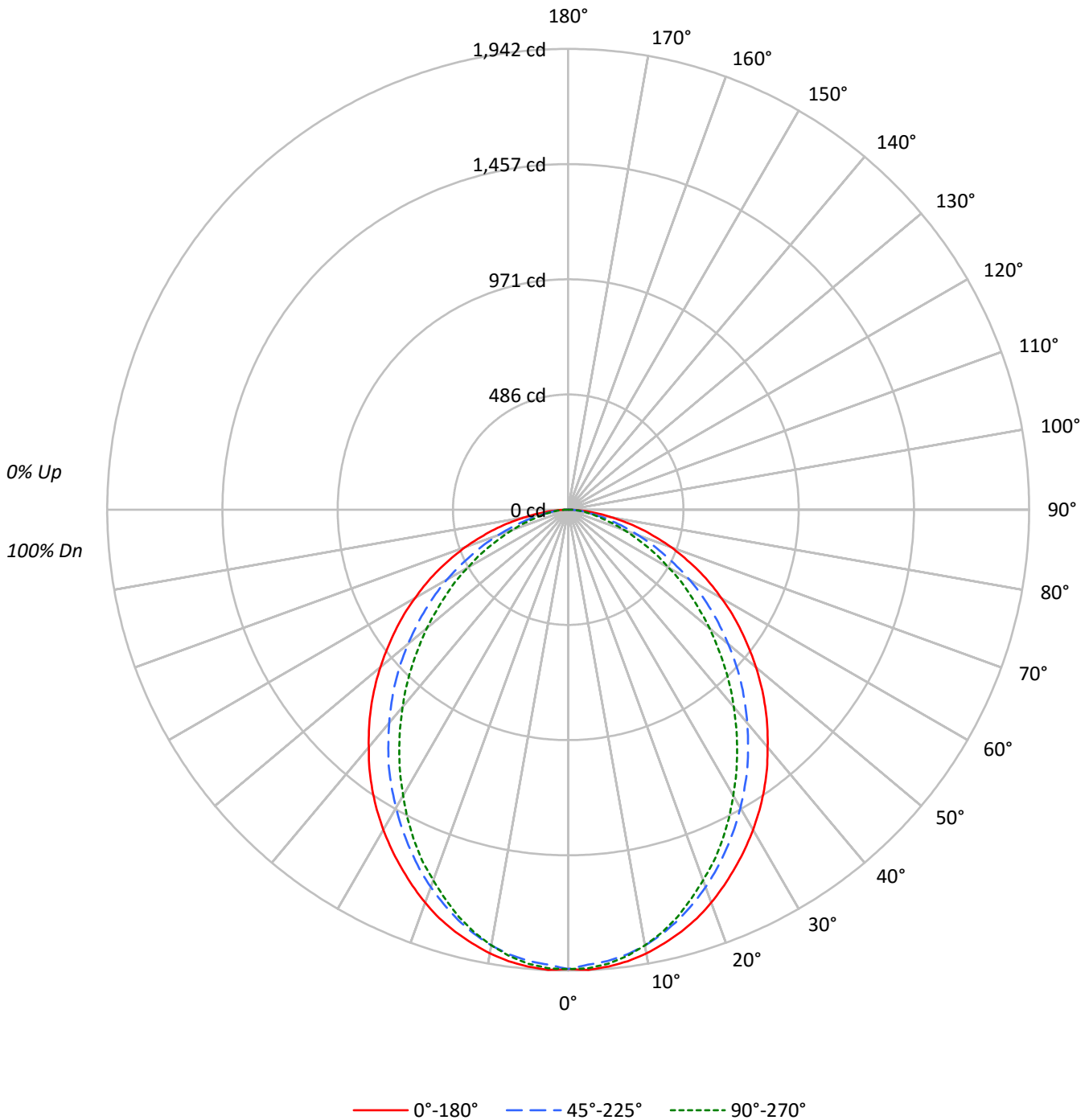
Input Watts (W): 41.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	54
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	47
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	41
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	35	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27

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

	0°	45°	90°
0°	15626	15626	15626
5°	15661	15469	15566
10°	15563	15284	15284
15°	15384	14963	14852
20°	15139	14540	14273
25°	14826	14046	13690
30°	14521	13526	12959
35°	14183	12985	12225
40°	13776	12370	11433
45°	13401	11759	10626
50°	12974	11057	9772
55°	12515	10325	8845
60°	12013	9524	7897
65°	11551	8521	6965
70°	10879	7416	5913
75°	10031	6148	4807
80°	8749	4686	4412
85°	7410	4252	3983



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.0	4.1
10°-20°	507.5	11.3
20°-30°	732.7	16.4
30°-40°	830.4	18.6
40°-50°	801.7	17.9
50°-60°	666.5	14.9
60°-70°	460.1	10.3
70°-80°	232.5	5.2
80°-90°	59.0	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°	1422.2	31.8
0°-40°	2252.5	50.4
0°-60°	3720.8	83.2
0°-90°	4472.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4472.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1936	1936	1936	1936	1936	
5°	1933	1927	1909	1924	1921	183
15°	1841	1827	1790	1787	1777	519
25°	1664	1638	1577	1552	1537	767
35°	1439	1392	1318	1267	1240	899
45°	1174	1119	1030	957	931	905
55°	889	830	734	657	628	796
65°	605	541	446	382	365	597
75°	322	267	197	163	154	339
85°	80	50	46	43	43	93
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1935.6	1935.6	1935.6	1935.6	1935.6
2.5°	1941.5	1935.6	1919.3	1935.6	1934.1
5°	1932.6	1926.7	1908.9	1923.7	1920.8
7.5°	1919.3	1913.4	1891.1	1901.5	1897.1
10°	1898.5	1891.1	1864.5	1870.4	1864.5
12.5°	1871.9	1863.0	1830.4	1833.3	1824.4
15°	1840.7	1827.4	1790.3	1787.4	1777.0
17.5°	1805.2	1785.9	1742.9	1735.5	1720.7
20°	1762.2	1742.9	1692.5	1680.7	1661.4
22.5°	1714.8	1692.5	1637.7	1618.4	1603.6
25°	1664.4	1637.7	1576.9	1551.7	1536.9
27.5°	1612.5	1579.9	1516.2	1486.5	1465.8
30°	1557.7	1520.6	1451.0	1413.9	1390.2
32.5°	1499.9	1456.9	1384.3	1339.8	1317.6
35°	1439.1	1391.7	1317.6	1267.2	1240.5
37.5°	1375.4	1326.5	1244.9	1190.1	1163.4
40°	1307.2	1258.3	1173.8	1111.6	1084.9
42.5°	1242.0	1190.1	1101.2	1037.5	1009.3
45°	1173.8	1119.0	1030.0	957.4	930.7
47.5°	1104.1	1047.8	955.9	880.4	850.7
50°	1033.0	975.2	880.4	806.2	778.1
52.5°	960.4	904.1	806.2	730.7	701.0
55°	889.2	830.0	733.6	656.6	628.4
57.5°	819.6	757.3	662.5	583.9	563.2
60°	744.0	684.7	589.9	512.8	489.1
62.5°	675.8	613.6	515.8	446.1	428.3
65°	604.7	541.0	446.1	382.4	364.6
67.5°	530.6	469.8	380.9	324.6	303.8
70°	460.9	398.7	314.2	265.3	250.5
72.5°	386.8	332.0	253.4	213.4	200.1
75°	321.6	266.8	197.1	163.0	154.1
77.5°	253.4	206.0	146.7	123.0	120.0
80°	188.2	145.2	100.8	96.3	94.9
82.5°	131.9	93.4	72.6	69.7	68.2
85°	80.0	50.4	45.9	43.0	43.0
87.5°	34.1	22.2	20.7	19.3	20.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)