

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: P334194

Luminaire Tested: **S124DW-S1195D940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334194  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124DW-S1195D940-4F0-1E-UDD-F  
Description: DEFINE 4 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 1195 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4233.3 lumens  
Efficiency: N/A  
Efficacy: 103.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Direct

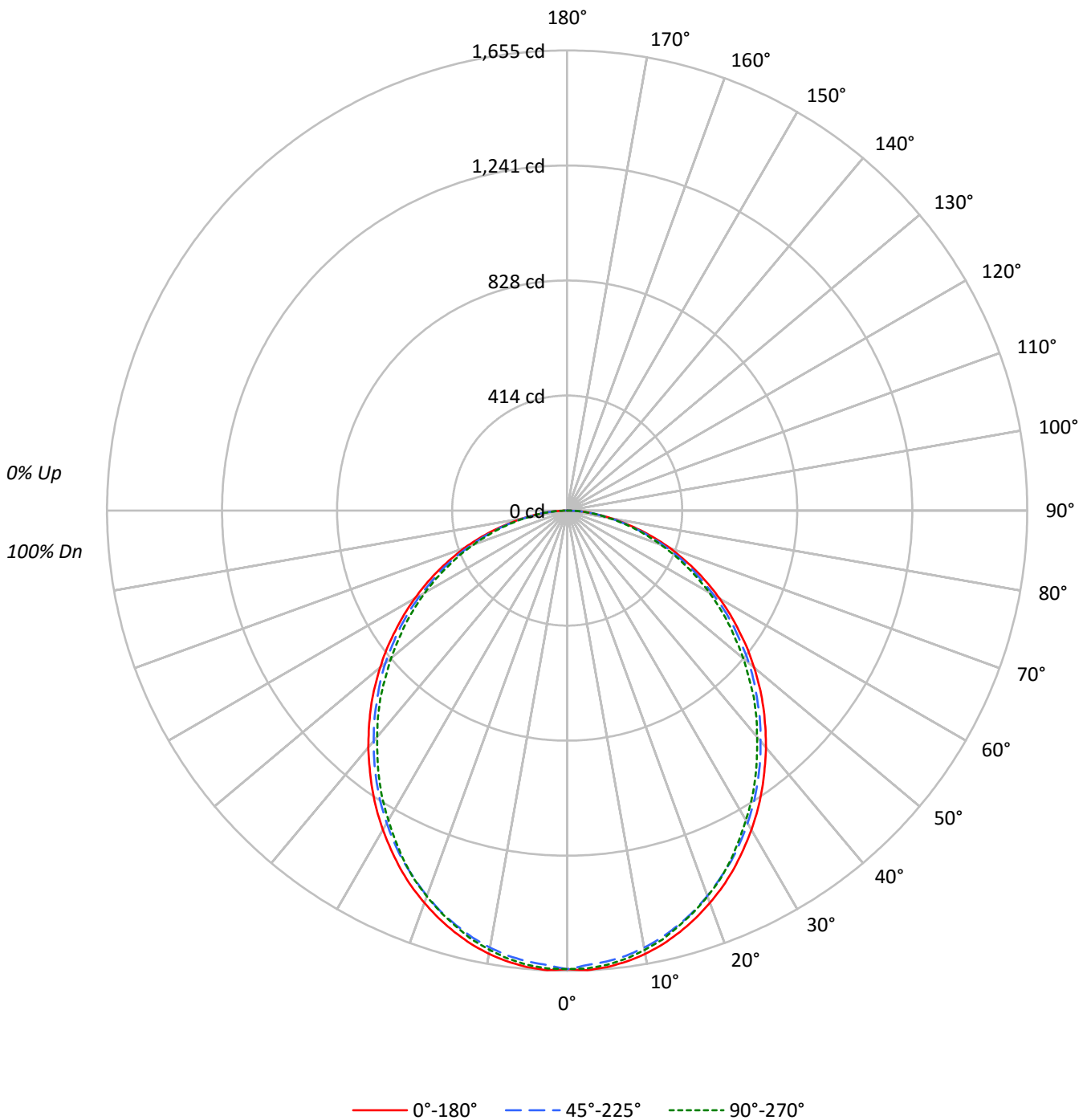
Input Watts (W): 41.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	13315	13315	13315
5°	13355	13195	13291
10°	13271	13087	13152
15°	13111	12901	12934
20°	12898	12671	12682
25°	12655	12408	12373
30°	12357	12098	11987
35°	12048	11774	11618
40°	11727	11407	11198
45°	11392	11045	10833
50°	11021	10722	10390
55°	10621	10306	9971
60°	10220	9838	9537
65°	9771	9391	9012
70°	9264	8797	8452
75°	8490	8079	7873
80°	7559	7248	7067
85°	6614	6363	6243



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.5	3.7
10°-20°	438.0	10.3
20°-30°	644.6	15.2
30°-40°	749.3	17.7
40°-50°	749.2	17.7
50°-60°	655.3	15.5
60°-70°	486.5	11.5
70°-80°	276.0	6.5
80°-90°	79.0	1.9
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°	1238.0	29.2
0°-40°	1987.3	46.9
0°-60°	3391.8	80.1
0°-90°	4233.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4233.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1649	1649	1649	1649	1649	
5°	1648	1643	1628	1643	1640	156
15°	1569	1563	1544	1552	1548	442
25°	1421	1412	1393	1394	1389	654
35°	1222	1213	1195	1186	1179	764
45°	998	988	967	953	949	769
55°	755	751	732	716	708	676
65°	512	505	492	478	472	506
75°	272	266	259	254	252	289
85°	71	71	69	69	67	81
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1649.3	1649.3	1649.3	1649.3	1649.3
2.5°	1654.6	1650.7	1636.1	1649.3	1648.0
5°	1648.0	1642.7	1628.2	1642.7	1640.1
7.5°	1636.1	1630.8	1615.0	1626.9	1625.6
10°	1618.9	1613.7	1596.5	1607.0	1604.4
12.5°	1596.5	1591.2	1572.7	1584.6	1580.6
15°	1568.7	1563.4	1543.6	1551.5	1547.6
17.5°	1537.0	1530.4	1511.9	1517.2	1514.5
20°	1501.3	1494.7	1474.9	1478.9	1476.2
22.5°	1463.0	1453.7	1433.9	1441.9	1436.6
25°	1420.7	1411.5	1393.0	1394.3	1389.0
27.5°	1373.1	1363.9	1346.7	1344.1	1337.4
30°	1325.6	1315.0	1297.8	1292.5	1285.9
32.5°	1275.3	1266.1	1247.6	1241.0	1234.4
35°	1222.5	1213.2	1194.7	1185.5	1178.9
37.5°	1167.0	1159.0	1139.2	1130.0	1120.7
40°	1112.8	1102.2	1082.4	1069.2	1062.6
42.5°	1054.6	1049.3	1026.9	1011.0	1007.0
45°	997.8	988.5	967.4	952.9	948.9
47.5°	938.3	931.7	911.9	896.0	885.5
50°	877.5	872.2	853.7	835.2	827.3
52.5°	818.1	811.5	791.6	775.8	765.2
55°	754.6	750.7	732.2	716.3	708.4
57.5°	695.2	691.2	672.7	656.8	648.9
60°	633.0	626.4	609.3	597.4	590.7
62.5°	572.2	567.0	548.5	537.9	531.3
65°	511.5	504.8	491.6	478.4	471.8
67.5°	449.3	444.1	430.8	417.6	416.3
70°	392.5	383.3	372.7	362.1	358.1
72.5°	331.7	322.5	314.5	306.6	302.6
75°	272.2	265.6	259.0	253.7	252.4
77.5°	214.1	211.5	204.8	203.5	199.6
80°	162.6	158.6	155.9	153.3	152.0
82.5°	112.3	111.0	111.0	109.7	108.4
85°	71.4	71.4	68.7	68.7	67.4
87.5°	34.4	33.0	31.7	31.7	31.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)