

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: P334348

Luminaire Tested: **S125DW-S1090D840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334348  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DW-S1090D840-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 1090 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4236.8 lumens  
Efficiency: N/A  
Efficacy: 121.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Direct

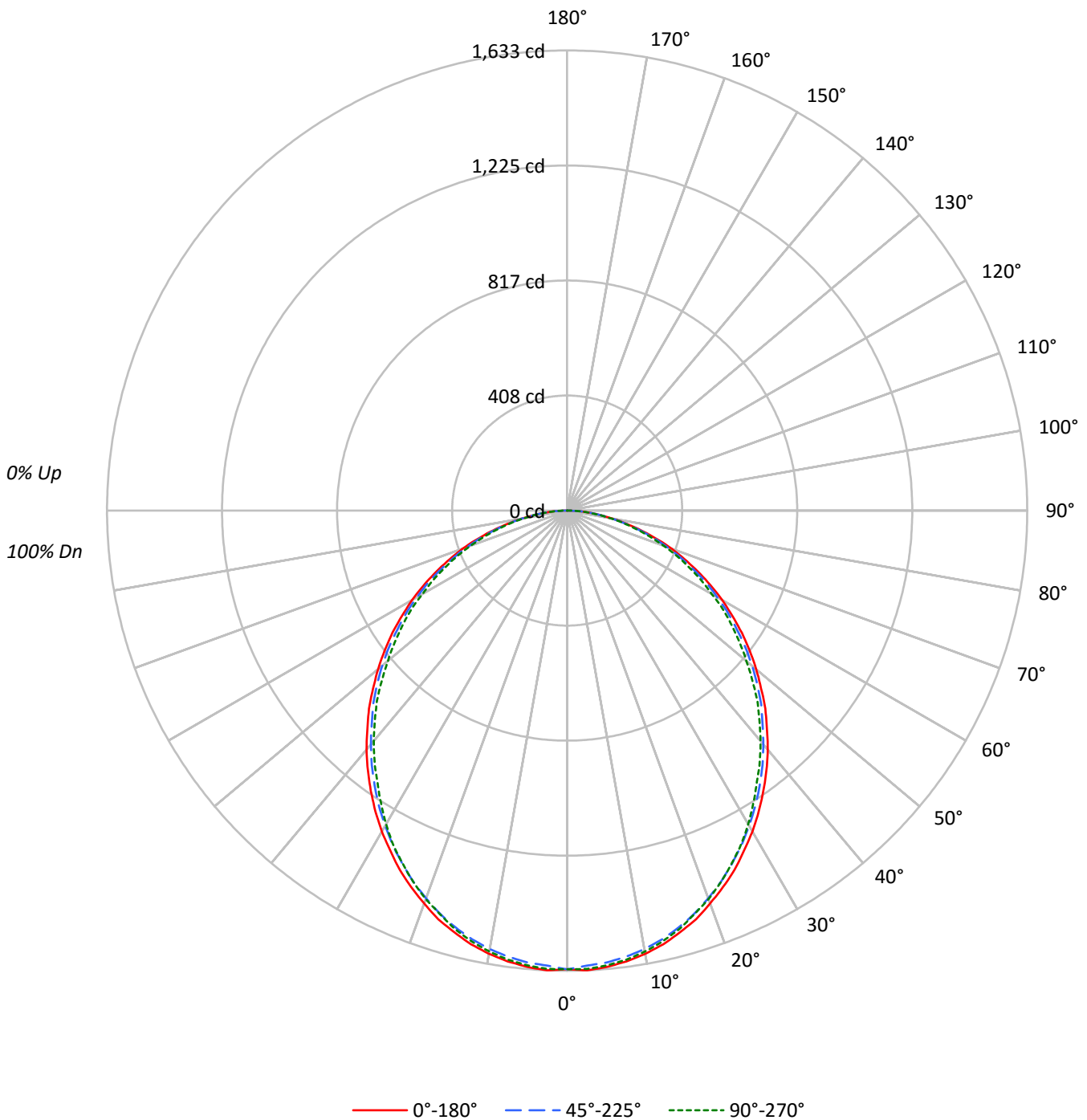
Input Watts (W): 34.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	94	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	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	10513	10513	10513
5°	10536	10436	10503
10°	10472	10363	10422
15°	10359	10238	10281
20°	10197	10064	10081
25°	10021	9856	9847
30°	9806	9633	9585
35°	9575	9392	9260
40°	9337	9131	9001
45°	9081	8892	8716
50°	8799	8605	8345
55°	8526	8279	8047
60°	8201	7952	7669
65°	7814	7557	7302
70°	7442	7100	6858
75°	6780	6555	6331
80°	6036	5940	5795
85°	5246	5343	5061



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.6	3.6
10°-20°	433.9	10.2
20°-30°	640.5	15.1
30°-40°	747.3	17.6
40°-50°	750.6	17.7
50°-60°	658.9	15.6
60°-70°	490.8	11.6
70°-80°	280.3	6.6
80°-90°	80.9	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°	1228.0	29.0
0°-40°	1975.4	46.6
0°-60°	3384.8	79.9
0°-90°	4236.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4236.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1628	1628	1628	1628	1628	
5°	1625	1623	1610	1621	1620	154
15°	1549	1545	1531	1538	1538	437
25°	1406	1400	1383	1386	1382	647
35°	1214	1209	1191	1185	1174	760
45°	994	989	974	958	954	766
55°	757	753	735	724	715	676
65°	511	509	494	483	478	507
75°	272	269	263	259	254	289
85°	71	72	72	71	68	82
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1627.8	1627.8	1627.8	1627.8	1627.8
2.5°	1633.0	1629.1	1616.2	1629.1	1627.8
5°	1625.2	1622.7	1609.8	1621.4	1620.1
7.5°	1613.6	1611.1	1596.9	1608.5	1607.2
10°	1596.9	1594.3	1580.2	1590.5	1589.2
12.5°	1576.3	1571.1	1558.3	1566.0	1566.0
15°	1549.3	1545.4	1531.2	1537.7	1537.7
17.5°	1520.9	1514.5	1500.3	1508.0	1501.6
20°	1483.6	1481.0	1464.3	1473.3	1466.8
22.5°	1446.2	1441.1	1425.6	1430.8	1426.9
25°	1406.3	1399.9	1383.1	1385.7	1381.8
27.5°	1359.9	1356.1	1339.3	1340.6	1336.8
30°	1314.9	1311.0	1291.7	1289.1	1285.3
32.5°	1265.9	1259.5	1242.8	1237.6	1229.9
35°	1214.4	1209.3	1191.2	1184.8	1174.5
37.5°	1161.6	1155.2	1138.4	1129.4	1123.0
40°	1107.5	1101.1	1083.1	1071.5	1067.6
42.5°	1049.6	1044.4	1026.4	1016.1	1009.7
45°	994.2	989.1	973.6	958.1	954.3
47.5°	933.7	935.0	915.6	900.2	891.2
50°	875.7	871.9	856.4	839.7	830.6
52.5°	816.5	813.9	797.2	783.0	772.7
55°	757.2	753.4	735.3	723.8	714.7
57.5°	694.1	692.9	677.4	661.9	658.1
60°	634.9	629.7	615.6	602.7	593.7
62.5°	573.1	569.2	557.6	543.5	537.0
65°	511.3	508.7	494.5	482.9	477.8
67.5°	450.7	445.6	435.3	425.0	422.4
70°	394.1	387.6	376.0	368.3	363.2
72.5°	332.3	328.4	322.0	312.9	307.8
75°	271.7	269.2	262.7	258.9	253.7
77.5°	215.1	213.8	209.9	207.3	203.5
80°	162.3	162.3	159.7	158.4	155.8
82.5°	115.9	113.3	113.3	110.8	110.8
85°	70.8	72.1	72.1	70.8	68.3
87.5°	34.8	34.8	33.5	33.5	30.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)