

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1031295

Luminaire Tested: S123DIW-B1000D1320UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031295
REPORT IS A COMBINATION OF REPORTS P990591 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D1320UB27-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

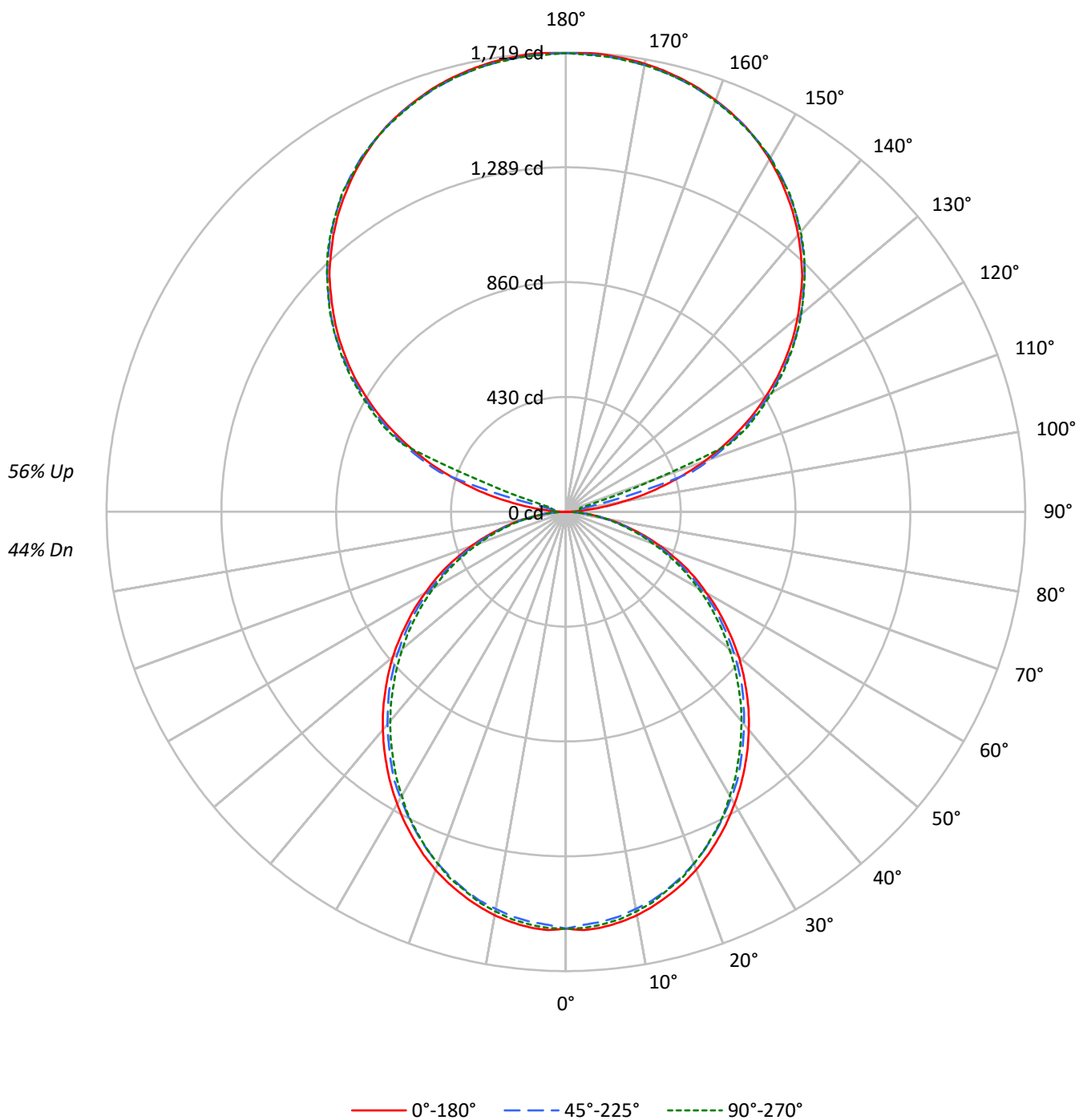
Lumens per Lamp: N/A
Luminaire Lumens: 9297.0 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 88.9
Input Voltage (V):
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: 24 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50
1	96	92	88	85	88	84	81	78	70	68	65	57	55	54	44	43	42
2	88	80	74	69	80	74	68	64	61	57	54	50	47	45	39	37	36
3	80	71	63	57	73	65	58	53	54	49	45	44	41	38	35	32	30
4	73	62	55	49	67	57	50	45	48	43	39	39	35	32	31	28	26
5	67	56	47	42	61	51	44	39	43	37	33	35	31	28	28	25	23
6	62	50	42	36	56	46	39	34	39	33	29	32	28	24	25	22	20
7	57	45	37	31	52	41	34	29	35	29	25	29	25	22	23	20	18
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	21	18	16
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	17	14
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16792	16792	16792
5°	16833	16212	16188
10°	16684	15663	15503
15°	16451	15092	14756
20°	16186	14460	14016
25°	15842	13791	13225
30°	15465	13098	12392
35°	15071	12392	11566
40°	14657	11650	10753
45°	14204	10928	9903
50°	13742	10122	9050
55°	13149	9282	8186
60°	12537	8356	7267
65°	11966	7354	6308
70°	11140	6244	5189
75°	9951	4944	4027
80°	8594	3475	2849
85°	6705	1869	1427

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14204 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.1	1.6
10°-20°	415.3	4.5
20°-30°	613.3	6.6
30°-40°	716.3	7.7
40°-50°	720.1	7.7
50°-60°	632.6	6.8
60°-70°	471.1	5.1
70°-80°	268.1	2.9
80°-90°	79.7	0.9
90°-100°	60.6	0.7
100°-110°	292.7	3.1
110°-120°	717.2	7.7
120°-130°	910.5	9.8
130°-140°	972.7	10.5
140°-150°	909.6	9.8
150°-160°	733.7	7.9
160°-170°	473.5	5.1
170°-180°	163.2	1.8
0°-30°	1175.6	12.6
0°-40°	1891.9	20.3
0°-60°	3244.6	34.9
0°-90°	4063.5	43.7
90°-120°	1070.5	11.5
90°-150°	3863.3	41.6
90°-180°	5234.0	56.3
0°-180°	9297.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1560	1560	1560	1560	1560	
5°	1561	1555	1540	1553	1551	148
15°	1486	1481	1463	1474	1466	419
25°	1349	1341	1324	1325	1321	622
35°	1167	1159	1142	1134	1127	730
45°	956	951	934	918	911	738
55°	726	724	707	692	685	650
65°	495	488	475	464	460	488
75°	262	256	252	246	241	279
85°	70	67	67	64	64	75
90°	1	14	31	36	38	9
95°	78	26	40	48	48	93
105°	380	394	279	54	56	403
115°	713	721	732	745	750	704
125°	1005	1015	1020	1023	1025	898
135°	1251	1259	1264	1268	1264	963
145°	1444	1453	1455	1458	1458	904
155°	1590	1588	1589	1596	1588	733
165°	1677	1673	1672	1682	1673	474
175°	1717	1710	1712	1720	1710	163
180°	1717	1717	1717	1717	1717	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1560.0	1560.0	1560.0	1560.0	1560.0
2.5°	1566.7	1561.3	1546.6	1560.0	1558.7
5°	1561.3	1554.6	1539.9	1553.3	1550.6
7.5°	1549.3	1542.6	1527.8	1539.9	1538.5
10°	1533.2	1526.5	1509.0	1521.1	1518.4
12.5°	1511.7	1506.3	1490.3	1498.3	1497.0
15°	1486.2	1480.9	1463.4	1474.2	1466.1
17.5°	1458.1	1451.4	1433.9	1442.0	1439.3
20°	1425.9	1417.8	1400.4	1405.7	1401.7
22.5°	1389.7	1381.6	1364.2	1368.2	1362.8
25°	1349.4	1341.4	1323.9	1325.3	1321.2
27.5°	1307.8	1299.8	1281.0	1282.3	1278.3
30°	1262.2	1255.5	1236.7	1236.7	1227.3
32.5°	1216.6	1207.2	1193.8	1184.4	1180.4
35°	1167.0	1158.9	1141.5	1133.5	1126.7
37.5°	1117.4	1106.6	1089.2	1079.8	1075.8
40°	1065.0	1057.0	1038.2	1027.5	1022.1
42.5°	1012.7	1003.3	984.6	973.8	968.5
45°	956.4	951.0	933.6	917.5	910.8
47.5°	901.4	893.3	877.3	861.2	855.8
50°	845.1	838.4	820.9	806.2	798.1
52.5°	786.0	782.0	763.2	751.2	743.1
55°	725.7	724.3	706.9	692.1	685.4
57.5°	669.3	664.0	650.6	637.1	629.1
60°	607.6	606.3	590.2	578.1	571.4
62.5°	552.6	548.6	532.5	520.4	516.4
65°	495.0	488.3	474.8	464.1	460.1
67.5°	433.3	427.9	417.2	407.8	402.4
70°	378.3	370.2	362.2	352.8	346.1
72.5°	320.6	315.2	305.8	297.8	295.1
75°	261.6	256.2	252.2	245.5	241.4
77.5°	209.3	206.6	201.2	195.8	195.8
80°	158.3	154.3	151.6	150.2	150.2
82.5°	108.7	108.7	108.7	106.0	104.6
85°	69.8	67.1	67.1	64.4	64.4
87.5°	34.9	30.9	29.5	28.2	28.2
90°	1.3	14.0	30.6	35.7	38.3
92.5°	29.3	21.7	33.2	42.1	43.4
95°	77.8	25.5	39.5	48.5	48.5
97.5°	141.6	105.9	40.8	51.0	52.3
100°	215.5	241.1	42.1	52.3	53.6
102.5°	299.7	316.3	94.4	52.3	54.8
105°	380.1	394.1	279.3	53.6	56.1
107.5°	465.5	477.0	496.1	299.7	132.6
110°	551.0	561.2	575.2	533.1	350.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	632.6	641.5	655.6	667.0	664.5
115°	713.0	720.6	732.1	744.8	749.9
117.5°	792.0	801.0	807.3	817.5	818.8
120°	864.7	876.2	880.0	890.2	890.2
122.5°	938.7	947.6	952.7	959.1	960.4
125°	1005.0	1015.2	1020.3	1022.9	1025.4
127.5°	1071.4	1081.6	1087.9	1091.8	1089.2
130°	1132.6	1142.8	1147.9	1153.0	1150.4
132.5°	1191.2	1201.5	1205.3	1210.4	1206.6
135°	1251.2	1258.8	1263.9	1267.8	1263.9
137.5°	1302.2	1312.4	1315.0	1321.3	1318.8
140°	1353.2	1360.9	1364.7	1369.8	1367.3
142.5°	1400.4	1408.1	1411.9	1415.7	1411.9
145°	1443.8	1452.7	1455.3	1457.8	1457.8
147.5°	1485.9	1492.2	1494.8	1497.3	1491.0
150°	1524.1	1528.0	1530.5	1533.1	1529.2
152.5°	1558.6	1559.8	1561.1	1566.2	1559.8
155°	1590.5	1587.9	1589.2	1595.6	1587.9
157.5°	1616.0	1616.0	1614.7	1622.3	1612.1
160°	1638.9	1637.6	1636.4	1644.0	1635.1
162.5°	1660.6	1656.8	1655.5	1664.4	1656.8
165°	1677.2	1673.4	1672.1	1682.3	1673.4
167.5°	1691.2	1686.1	1686.1	1696.3	1686.1
170°	1702.7	1697.6	1697.6	1707.8	1697.6
172.5°	1710.3	1704.0	1705.2	1715.4	1704.0
175°	1716.7	1710.3	1711.6	1720.5	1710.3
177.5°	1719.3	1712.9	1714.2	1724.4	1711.6
180°	1716.7	1716.7	1716.7	1716.7	1716.7

(END OF REPORT)