

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: P1031293

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031293
REPORT IS A COMBINATION OF REPORTS P990588 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-D
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

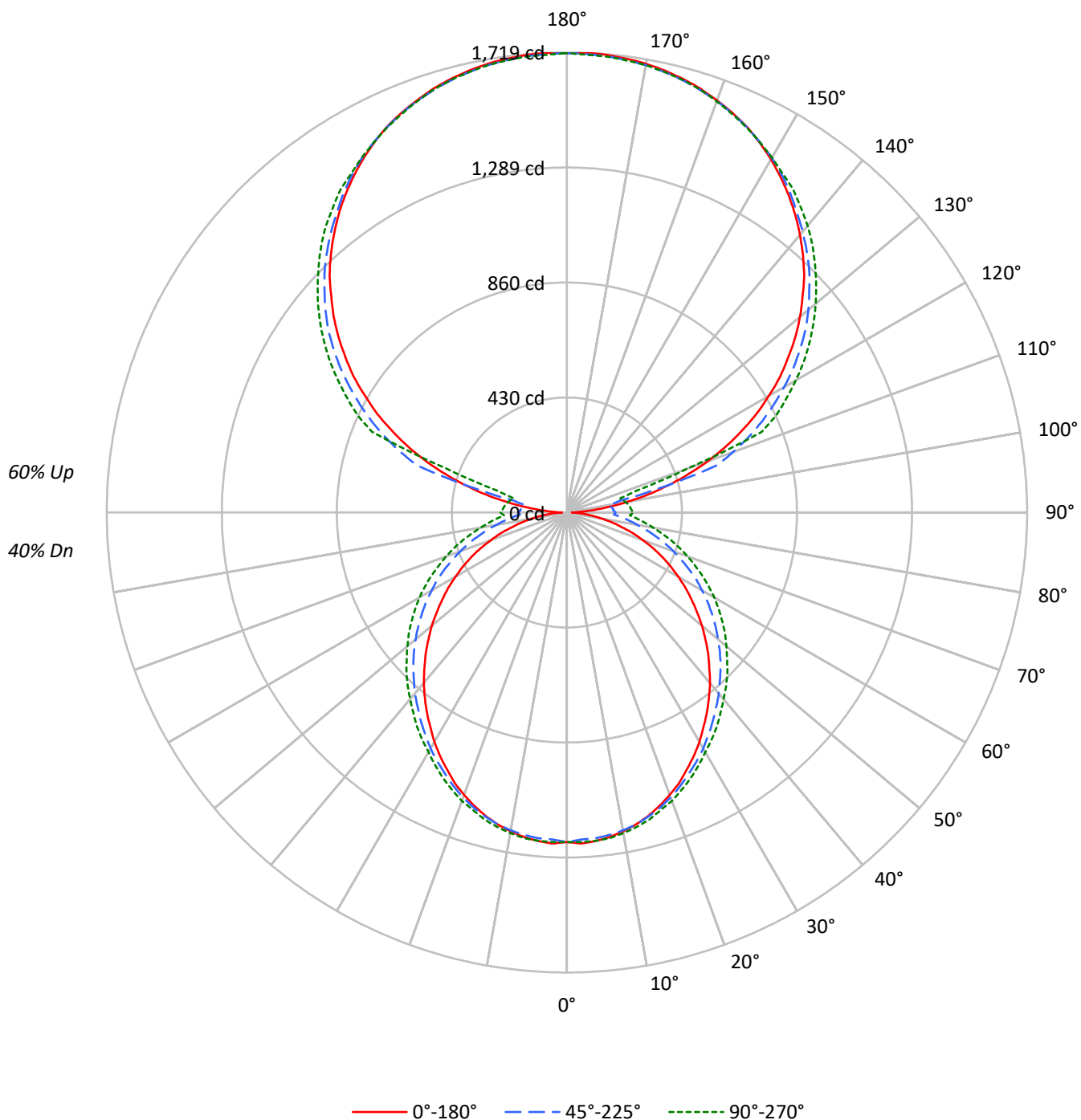
Lumens per Lamp: N/A
Luminaire Lumens: 9375.0 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	47	47	47
1	95	90	86	82	86	82	79	75	67	65	62	53	51	50	40	39	38
2	86	78	72	66	78	71	66	61	58	54	51	46	43	41	35	33	32
3	78	68	61	55	71	62	56	51	51	46	42	41	37	34	31	29	27
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23
5	65	54	45	39	59	49	42	36	40	35	31	32	28	25	25	22	20
6	60	48	40	34	54	44	37	31	36	31	27	29	25	22	22	19	17
7	55	43	35	30	50	40	32	27	33	27	23	26	22	19	20	17	15
8	51	39	31	26	47	36	29	24	30	24	21	24	20	17	19	16	13
9	48	36	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12
10	45	33	25	21	41	30	23	19	25	20	16	20	16	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13254	13254	13254
5°	13289	12864	12854
10°	13165	12516	12420
15°	12991	12131	11960
20°	12743	11702	11467
25°	12439	11219	10956
30°	12127	10782	10442
35°	11778	10323	10023
40°	11445	9903	9581
45°	11075	9499	9217
50°	10708	9096	8821
55°	10304	8682	8458
60°	9909	8260	8084
65°	9500	7811	7650
70°	8888	7306	7200
75°	8114	6732	6735
80°	7210	6147	6207
85°	6311	5678	5827

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11075 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	1.2
10°-20°	333.0	3.6
20°-30°	497.9	5.3
30°-40°	594.5	6.3
40°-50°	622.0	6.6
50°-60°	583.7	6.2
60°-70°	487.5	5.2
70°-80°	348.6	3.7
80°-90°	210.9	2.2
90°-100°	190.9	2.0
100°-110°	388.5	4.1
110°-120°	781.2	8.3
120°-130°	947.0	10.1
130°-140°	989.1	10.6
140°-150°	913.0	9.7
150°-160°	733.7	7.8
160°-170°	473.5	5.1
170°-180°	163.2	1.7
0°-30°	947.7	10.1
0°-40°	1542.2	16.5
0°-60°	2747.9	29.3
0°-90°	3795.0	40.5
90°-120°	1360.6	14.5
90°-150°	4209.7	44.9
90°-180°	5580.0	59.5
0°-180°	9375.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1231	1231	1231	1231	1231	
5°	1233	1230	1222	1233	1231	117
15°	1174	1178	1176	1190	1188	331
25°	1060	1073	1077	1094	1094	488
35°	912	934	951	971	976	570
45°	746	778	812	837	848	575
55°	569	613	661	697	708	509
65°	393	445	504	544	558	388
75°	213	276	343	388	404	228
85°	66	133	204	250	263	68
90°	19	97	182	233	249	17
95°	93	93	172	223	236	104
105°	391	437	380	192	206	414
115°	720	743	803	848	864	711
125°	1009	1019	1063	1094	1106	902
135°	1254	1260	1280	1308	1311	965
145°	1445	1453	1455	1468	1474	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°	1231.3	1231.3	1231.3	1231.3	1231.3
2.5°	1238.0	1233.9	1223.2	1233.9	1232.6
5°	1232.6	1229.9	1221.9	1232.6	1231.3
7.5°	1223.2	1223.2	1215.2	1228.6	1227.2
10°	1209.8	1212.5	1205.8	1219.2	1216.5
12.5°	1193.7	1197.7	1193.7	1205.8	1203.1
15°	1173.6	1177.6	1176.3	1189.7	1188.3
17.5°	1149.4	1157.5	1156.2	1168.2	1165.5
20°	1122.6	1130.7	1133.3	1145.4	1146.8
22.5°	1094.5	1102.5	1106.5	1122.6	1121.3
25°	1059.6	1073.0	1077.0	1094.5	1094.5
27.5°	1026.1	1040.8	1048.9	1063.6	1064.9
30°	989.8	1007.3	1018.0	1034.1	1034.1
32.5°	949.6	969.7	984.5	1001.9	1005.9
35°	912.0	933.5	950.9	971.1	976.4
37.5°	871.8	895.9	916.1	938.9	942.9
40°	831.6	855.7	882.5	905.3	910.7
42.5°	787.3	818.2	846.3	871.8	879.9
45°	745.7	777.9	811.5	836.9	847.7
47.5°	701.5	737.7	775.2	803.4	811.5
50°	658.5	696.1	737.7	768.5	777.9
52.5°	612.9	653.2	700.1	732.3	744.4
55°	568.7	612.9	661.2	697.4	708.2
57.5°	525.8	571.4	623.7	659.9	672.0
60°	480.2	528.4	583.4	621.0	635.7
62.5°	437.2	486.9	545.9	583.4	596.9
65°	393.0	445.3	504.3	544.5	558.0
67.5°	348.7	403.7	462.7	507.0	517.7
70°	301.8	359.5	423.8	466.8	480.2
72.5°	258.9	316.5	383.6	427.9	441.3
75°	213.3	276.3	343.4	387.6	403.7
77.5°	174.4	237.4	304.5	351.4	363.5
80°	132.8	198.5	268.2	313.9	327.3
82.5°	96.6	163.6	234.7	280.3	293.7
85°	65.7	132.8	203.9	249.5	262.9
87.5°	40.2	107.3	175.7	221.3	234.7
90°	18.7	97.2	182.2	232.9	248.9
92.5°	45.4	95.5	174.0	227.2	240.6
95°	92.6	92.6	172.3	222.9	236.3
97.5°	155.0	167.6	165.5	216.0	230.7
100°	227.6	296.1	158.8	207.9	222.6
102.5°	310.4	364.6	203.0	198.5	214.4
105°	390.8	437.0	379.9	191.7	206.3
107.5°	474.9	514.6	588.6	428.5	273.4
110°	559.0	593.4	661.0	653.8	482.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	640.6	668.3	733.4	778.3	787.9
115°	719.7	743.4	803.2	848.1	863.9
117.5°	798.7	818.4	870.3	912.7	924.8
120°	870.1	888.3	936.3	977.4	986.8
122.5°	944.1	955.6	1002.3	1038.2	1048.9
125°	1009.0	1019.2	1063.2	1094.0	1105.9
127.5°	1075.4	1084.3	1124.1	1154.8	1161.6
130°	1136.6	1145.5	1177.4	1208.0	1213.4
132.5°	1193.9	1204.2	1228.1	1257.3	1262.9
135°	1253.9	1260.1	1280.0	1308.0	1310.8
137.5°	1304.9	1313.7	1325.7	1353.5	1357.7
140°	1354.5	1362.2	1370.1	1395.3	1399.5
142.5°	1401.7	1408.1	1411.9	1433.1	1436.0
145°	1445.1	1452.7	1455.3	1468.5	1473.9
147.5°	1485.9	1492.2	1494.8	1501.3	1500.4
150°	1524.1	1528.0	1530.5	1533.1	1531.9
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)