

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: P1031484

Luminaire Tested: S123DIW-B1165D1535UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031484
REPORT IS A COMBINATION OF REPORTS P991033 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1535UB40-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

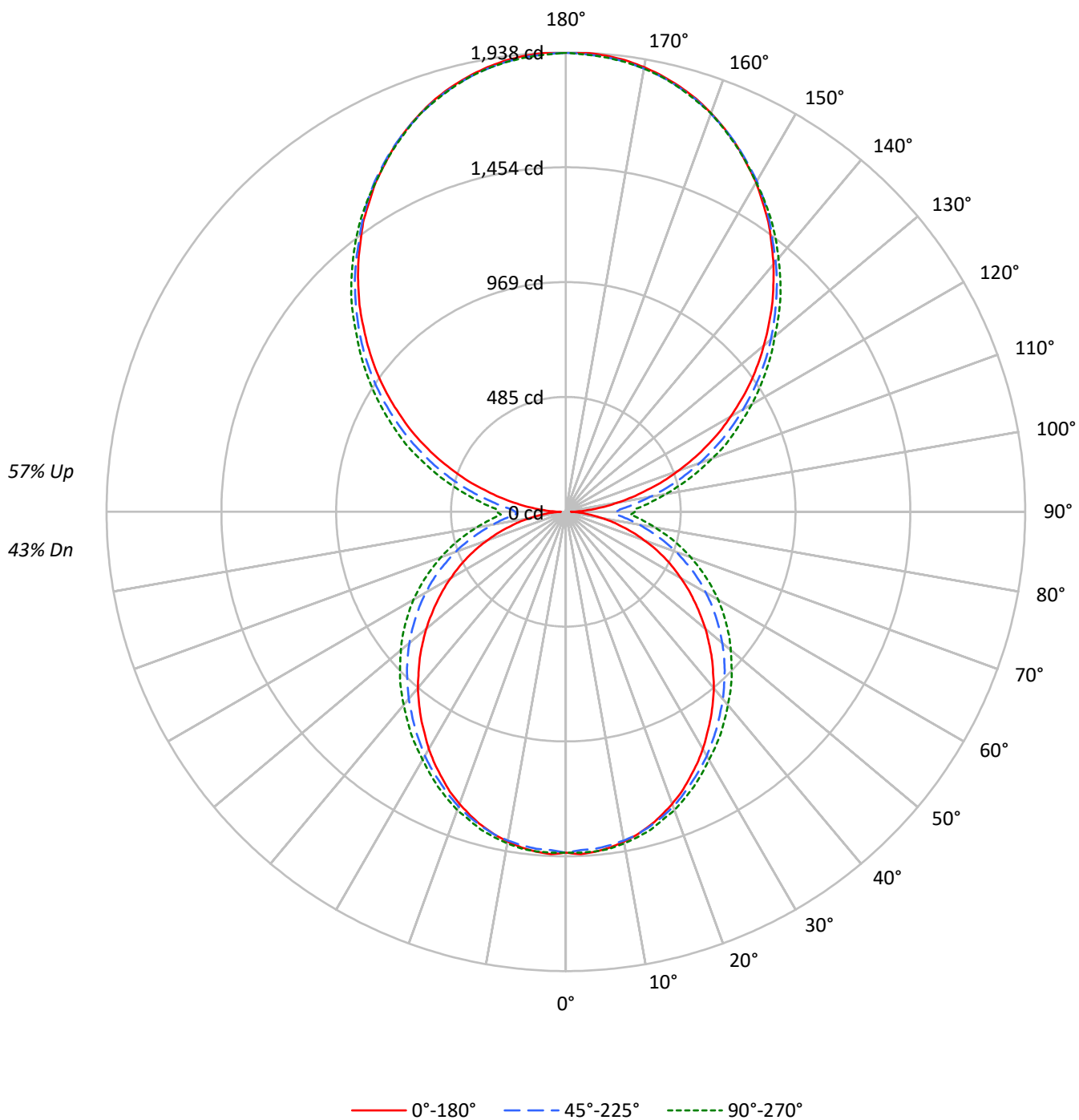
Lumens per Lamp: N/A
Luminaire Lumens: 10203.0 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 113.5
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	95	91	87	83	87	83	79	76	68	66	63	55	53	52	43	42	40
2	86	79	72	67	79	72	66	62	59	55	52	48	45	42	37	35	33
3	79	69	61	55	71	63	56	51	52	47	43	42	38	35	33	30	28
4	72	61	53	46	65	56	49	43	46	41	36	37	33	30	29	26	24
5	66	54	46	39	60	49	42	37	41	36	31	33	29	26	26	23	21
6	60	48	40	34	55	44	37	32	37	31	27	30	26	23	24	20	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	21	18	16
8	52	39	32	26	47	36	29	24	30	25	21	25	21	18	20	17	14
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13
10	45	33	26	21	41	30	24	19	26	20	17	21	17	14	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15480	15480	15480
5°	15521	15025	15013
10°	15376	14618	14506
15°	15173	14168	13969
20°	14884	13668	13393
25°	14528	13103	12795
30°	14165	12593	12195
35°	13756	12058	11706
40°	13366	11567	11190
45°	12935	11093	10764
50°	12508	10623	10303
55°	12035	10141	9878
60°	11572	9647	9442
65°	11096	9122	8934
70°	10381	8533	8408
75°	9476	7861	7866
80°	8420	7181	7248
85°	7377	6630	6805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12935 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.4	1.3
10°-20°	388.9	3.8
20°-30°	581.6	5.7
30°-40°	694.4	6.8
40°-50°	726.5	7.1
50°-60°	681.7	6.7
60°-70°	569.4	5.6
70°-80°	407.2	4.0
80°-90°	246.4	2.4
90°-100°	276.9	2.7
100°-110°	489.2	4.8
110°-120°	717.1	7.0
120°-130°	887.7	8.7
130°-140°	969.0	9.5
140°-150°	937.8	9.2
150°-160°	786.2	7.7
160°-170°	523.4	5.1
170°-180°	183.3	1.8
0°-30°	1106.9	10.8
0°-40°	1801.2	17.7
0°-60°	3209.4	31.5
0°-90°	4432.4	43.4
90°-120°	1483.2	14.5
90°-150°	4277.7	41.9
90°-180°	5771.0	56.6
0°-180°	10203.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1440	1436	1427	1440	1438	137
15°	1371	1375	1374	1390	1388	386
25°	1238	1253	1258	1278	1278	570
35°	1065	1090	1111	1134	1140	666
45°	871	909	948	978	990	672
55°	664	716	772	815	827	595
65°	459	520	589	636	652	454
75°	249	323	401	453	472	266
85°	77	155	238	291	307	79
90°	22	114	214	273	292	21
95°	107	179	268	322	338	112
105°	355	395	476	520	538	379
115°	654	678	731	770	781	648
125°	951	956	998	1025	1030	849
135°	1231	1238	1254	1276	1281	948
145°	1491	1492	1497	1508	1508	931
155°	1705	1705	1707	1713	1702	785
165°	1858	1853	1853	1862	1851	524
175°	1932	1926	1926	1935	1924	184
180°	1937	1937	1937	1937	1937	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1438.1	1438.1	1438.1	1438.1	1438.1
2.5°	1445.9	1441.2	1428.7	1441.2	1439.6
5°	1439.6	1436.5	1427.1	1439.6	1438.1
7.5°	1428.7	1428.7	1419.3	1434.9	1433.4
10°	1413.0	1416.1	1408.3	1424.0	1420.8
12.5°	1394.2	1398.9	1394.2	1408.3	1405.2
15°	1370.7	1375.4	1373.8	1389.5	1387.9
17.5°	1342.5	1351.9	1350.3	1364.4	1361.3
20°	1311.2	1320.6	1323.7	1337.8	1339.4
22.5°	1278.3	1287.7	1292.4	1311.2	1309.6
25°	1237.5	1253.2	1257.9	1278.3	1278.3
27.5°	1198.4	1215.6	1225.0	1242.2	1243.8
30°	1156.1	1176.5	1189.0	1207.8	1207.8
32.5°	1109.1	1132.6	1149.8	1170.2	1174.9
35°	1065.2	1090.3	1110.7	1134.2	1140.4
37.5°	1018.2	1046.4	1069.9	1096.6	1101.3
40°	971.2	999.4	1030.8	1057.4	1063.7
42.5°	919.5	955.6	988.5	1018.2	1027.6
45°	871.0	908.6	947.7	977.5	990.0
47.5°	819.3	861.6	905.4	938.3	947.7
50°	769.2	813.0	861.6	897.6	908.6
52.5°	715.9	762.9	817.7	855.3	869.4
55°	664.2	715.9	772.3	814.6	827.1
57.5°	614.1	667.3	728.4	770.7	784.8
60°	560.8	617.2	681.4	725.3	742.5
62.5°	510.7	568.6	637.6	681.4	697.1
65°	459.0	520.1	589.0	636.0	651.7
67.5°	407.3	471.5	540.4	592.1	604.7
70°	352.5	419.8	495.0	545.1	560.8
72.5°	302.3	369.7	448.0	499.7	515.4
75°	249.1	322.7	401.0	452.7	471.5
77.5°	203.6	277.3	355.6	410.4	424.5
80°	155.1	231.8	313.3	366.6	382.2
82.5°	112.8	191.1	274.1	327.4	343.1
85°	76.8	155.1	238.1	291.4	307.0
87.5°	47.0	125.3	205.2	258.5	274.1
90°	21.9	113.8	213.5	272.9	291.5
92.5°	64.4	141.0	228.4	284.7	295.7
95°	107.0	178.7	267.7	322.3	338.0
97.5°	163.3	227.3	310.0	364.6	378.7
100°	221.0	280.2	359.9	409.9	428.6
102.5°	287.9	336.3	417.5	465.8	480.0
105°	354.8	395.4	476.5	520.4	537.5
107.5°	432.4	466.8	537.1	584.0	596.5
110°	503.8	535.1	600.8	647.6	657.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	579.9	603.3	662.9	709.6	723.7
115°	654.3	677.7	731.1	770.2	781.3
117.5°	731.9	746.0	796.2	833.8	841.8
120°	801.9	818.9	862.9	897.4	905.4
122.5°	876.5	885.7	931.2	961.0	967.5
125°	950.9	955.5	997.9	1024.7	1029.6
127.5°	1020.9	1028.4	1064.6	1086.8	1091.7
130°	1090.9	1101.5	1128.3	1151.9	1150.7
132.5°	1159.3	1171.4	1191.9	1212.5	1215.9
135°	1230.8	1238.4	1254.1	1276.2	1280.9
137.5°	1296.2	1302.3	1317.8	1335.2	1338.5
140°	1363.1	1370.7	1377.0	1398.9	1396.1
142.5°	1425.5	1431.5	1434.6	1453.4	1453.6
145°	1490.9	1492.4	1496.9	1507.9	1508.1
147.5°	1545.6	1551.7	1556.3	1561.0	1558.1
150°	1604.9	1608.0	1611.0	1611.0	1605.0
152.5°	1653.6	1658.2	1659.7	1662.7	1655.1
155°	1705.3	1705.3	1706.9	1713.0	1702.3
157.5°	1749.5	1747.9	1749.5	1755.5	1746.4
160°	1790.5	1787.5	1787.5	1795.1	1789.0
162.5°	1827.0	1822.5	1824.0	1831.6	1821.0
165°	1857.5	1852.9	1852.9	1862.0	1851.4
167.5°	1883.3	1877.2	1878.8	1887.9	1878.8
170°	1904.6	1898.5	1898.5	1909.2	1898.5
172.5°	1921.4	1915.3	1915.3	1924.4	1913.8
175°	1932.0	1925.9	1925.9	1935.1	1924.4
177.5°	1938.1	1932.0	1932.0	1941.1	1930.5
180°	1936.6	1936.6	1936.6	1936.6	1936.6

(END OF REPORT)