

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: P1031544

Luminaire Tested: S123DIW-B1165D755UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031544
REPORT IS A COMBINATION OF REPORTS P991167 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D755UB40-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

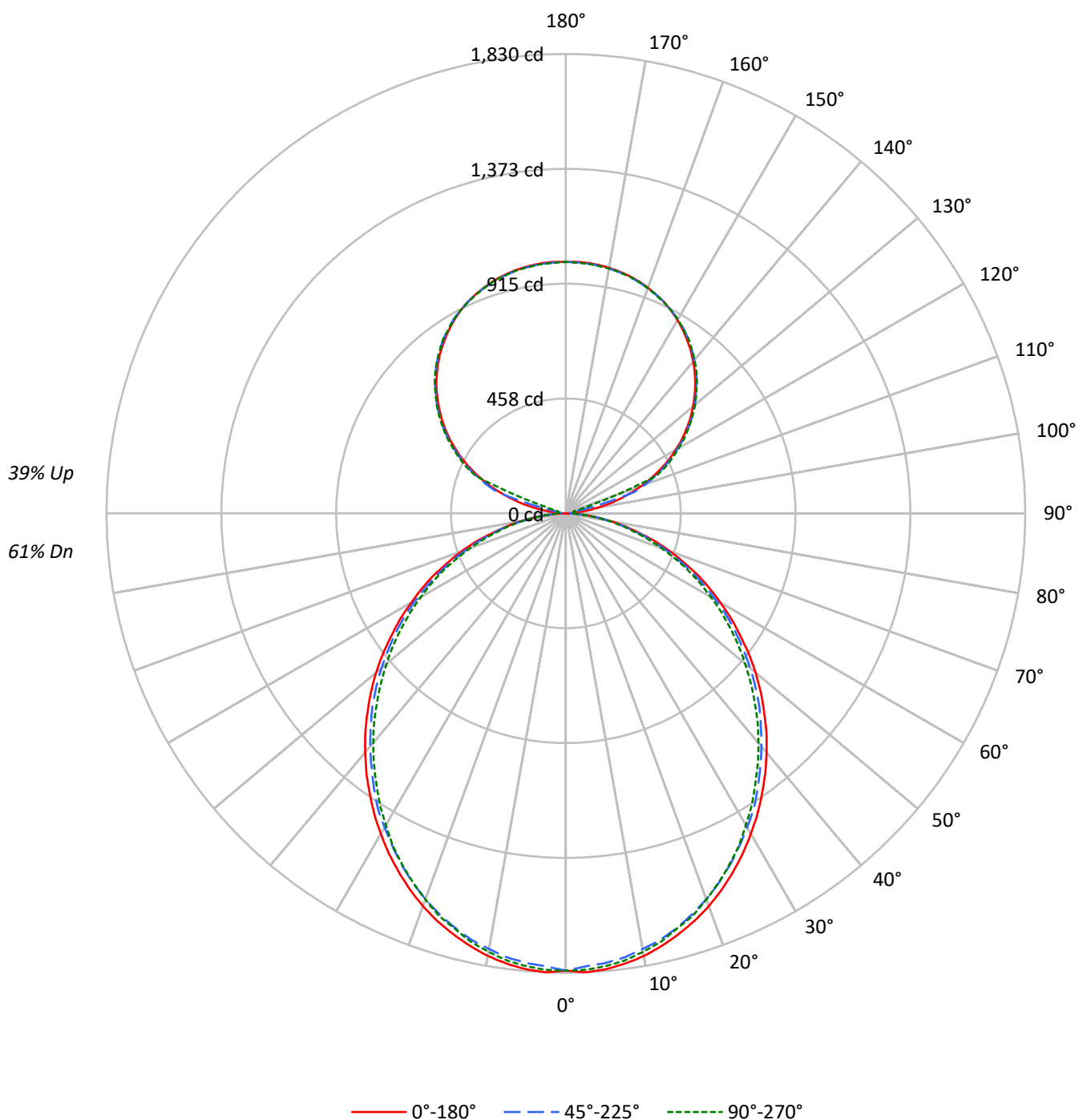
Lumens per Lamp: N/A
Luminaire Lumens: 7797.0 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 84.5
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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66
1	100	96	92	88	94	90	86	83	78	76	73	68	66	64	58	57	56
2	91	84	77	72	85	78	73	68	69	64	61	60	56	54	51	49	47
3	83	73	66	60	77	69	62	57	61	55	51	53	49	45	45	42	40
4	76	65	57	51	71	61	54	48	54	48	44	47	42	39	41	37	34
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	37	33	30
6	64	52	44	38	60	49	42	36	43	37	33	38	33	30	33	29	26
7	60	47	39	33	56	44	37	32	39	33	29	35	30	26	30	26	23
8	55	43	35	29	52	40	33	28	36	30	26	32	27	23	28	24	21
9	52	39	31	26	48	37	30	25	33	27	23	29	24	21	26	22	19
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19609	19609	19609
5°	19657	18932	18903
10°	19482	18290	18103
15°	19211	17624	17231
20°	18900	16885	16366
25°	18500	16105	15444
30°	18059	15296	14471
35°	17598	14471	13506
40°	17117	13605	12557
45°	16586	12761	11565
50°	16047	11819	10569
55°	15354	10839	9560
60°	14642	9758	8486
65°	13972	8588	7366
70°	13008	7290	6059
75°	11617	5773	4703
80°	10033	4057	3326
85°	7828	2180	1667

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16586 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.7	2.2
10°-20°	484.9	6.2
20°-30°	716.2	9.2
30°-40°	836.4	10.7
40°-50°	840.9	10.8
50°-60°	738.7	9.5
60°-70°	550.1	7.1
70°-80°	313.1	4.0
80°-90°	91.0	1.2
90°-100°	35.3	0.5
100°-110°	170.8	2.2
110°-120°	418.5	5.4
120°-130°	531.3	6.8
130°-140°	567.6	7.3
140°-150°	530.8	6.8
150°-160°	428.1	5.5
160°-170°	276.3	3.5
170°-180°	95.2	1.2
0°-30°	1372.8	17.6
0°-40°	2209.3	28.3
0°-60°	3788.8	48.6
0°-90°	4743.0	60.8
90°-120°	624.7	8.0
90°-150°	2254.4	28.9
90°-180°	3054.0	39.2
0°-180°	7797.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1822	1822	1822	1822	1822	
5°	1823	1815	1798	1814	1811	173
15°	1736	1729	1709	1721	1712	489
25°	1576	1566	1546	1548	1543	726
35°	1363	1353	1333	1324	1316	853
45°	1117	1110	1090	1071	1064	862
55°	847	846	826	808	800	759
65°	578	570	554	542	537	570
75°	305	299	294	287	282	326
85°	82	78	78	75	75	87
90°	1	8	18	21	22	8
95°	45	15	23	28	28	54
105°	222	230	163	31	33	235
115°	416	420	427	435	438	411
125°	586	592	595	597	598	524
135°	730	735	738	740	738	562
145°	842	848	849	851	851	527
155°	928	927	927	931	927	428
165°	979	976	976	982	976	277
175°	1002	998	999	1004	998	95
180°	1002	1002	1002	1002	1002	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1821.7	1821.7	1821.7	1821.7	1821.7
2.5°	1829.5	1823.2	1806.0	1821.7	1820.1
5°	1823.2	1815.4	1798.2	1813.8	1810.7
7.5°	1809.1	1801.3	1784.1	1798.2	1796.6
10°	1790.3	1782.5	1762.1	1776.2	1773.1
12.5°	1765.3	1759.0	1740.2	1749.6	1748.1
15°	1735.5	1729.3	1708.9	1721.4	1712.0
17.5°	1702.6	1694.8	1674.4	1683.8	1680.7
20°	1665.0	1655.6	1635.3	1641.5	1636.8
22.5°	1622.7	1613.3	1593.0	1597.7	1591.4
25°	1575.8	1566.4	1546.0	1547.6	1542.9
27.5°	1527.2	1517.8	1495.9	1497.4	1492.7
30°	1473.9	1466.1	1444.2	1444.2	1433.2
32.5°	1420.7	1409.7	1394.1	1383.1	1378.4
35°	1362.7	1353.3	1333.0	1323.6	1315.7
37.5°	1304.8	1292.2	1271.9	1260.9	1256.2
40°	1243.7	1234.3	1212.4	1199.8	1193.6
42.5°	1182.6	1171.6	1149.7	1137.2	1130.9
45°	1116.8	1110.5	1090.2	1071.4	1063.6
47.5°	1052.6	1043.2	1024.4	1005.6	999.3
50°	986.8	979.0	958.6	941.4	932.0
52.5°	917.9	913.2	891.3	877.2	867.8
55°	847.4	845.8	825.5	808.2	800.4
57.5°	781.6	775.3	759.7	744.0	734.6
60°	709.6	708.0	689.2	675.1	667.3
62.5°	645.3	640.6	621.8	607.7	603.0
65°	578.0	570.2	554.5	542.0	537.3
67.5°	505.9	499.7	487.1	476.2	469.9
70°	441.7	432.3	422.9	412.0	404.1
72.5°	374.4	368.1	357.1	347.7	344.6
75°	305.4	299.2	294.5	286.6	281.9
77.5°	244.4	241.2	235.0	228.7	228.7
80°	184.8	180.1	177.0	175.4	175.4
82.5°	126.9	126.9	126.9	123.7	122.2
85°	81.5	78.3	78.3	75.2	75.2
87.5°	40.7	36.0	34.5	32.9	32.9
90°	0.7	8.2	17.9	20.8	22.3
92.5°	17.1	12.7	19.4	24.6	25.3
95°	45.4	14.9	23.1	28.3	28.3
97.5°	82.6	61.8	23.8	29.8	30.5
100°	125.8	140.7	24.6	30.5	31.3
102.5°	174.9	184.6	55.1	30.5	32.0
105°	221.8	230.0	163.0	31.3	32.7
107.5°	271.7	278.4	289.5	174.9	77.4
110°	321.5	327.5	335.7	311.1	204.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	369.2	374.4	382.6	389.2	387.8
115°	416.0	420.5	427.2	434.6	437.6
117.5°	462.2	467.4	471.1	477.1	477.8
120°	504.6	511.3	513.5	519.5	519.5
122.5°	547.8	553.0	556.0	559.7	560.4
125°	586.5	592.4	595.4	596.9	598.4
127.5°	625.2	631.1	634.9	637.1	635.6
130°	660.9	666.9	669.8	672.8	671.3
132.5°	695.1	701.1	703.3	706.3	704.1
135°	730.1	734.6	737.6	739.8	737.6
137.5°	759.9	765.8	767.3	771.1	769.6
140°	789.7	794.1	796.4	799.3	797.8
142.5°	817.2	821.7	823.9	826.1	823.9
145°	842.5	847.7	849.2	850.7	850.7
147.5°	867.1	870.8	872.3	873.8	870.0
150°	889.4	891.6	893.1	894.6	892.4
152.5°	909.5	910.2	911.0	914.0	910.2
155°	928.1	926.6	927.3	931.1	926.6
157.5°	943.0	943.0	942.2	946.7	940.7
160°	956.4	955.6	954.9	959.4	954.1
162.5°	969.0	966.8	966.1	971.3	966.8
165°	978.7	976.5	975.7	981.7	976.5
167.5°	986.9	983.9	983.9	989.9	983.9
170°	993.6	990.6	990.6	996.6	990.6
172.5°	998.1	994.3	995.1	1001.0	994.3
175°	1001.8	998.1	998.8	1004.0	998.1
177.5°	1003.3	999.5	1000.3	1006.2	998.8
180°	1001.8	1001.8	1001.8	1001.8	1001.8

(END OF REPORT)