

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: P1031423

Luminaire Tested: S123DIW-B1165D1030UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031423
REPORT IS A COMBINATION OF REPORTS P990892 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1030UB35-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

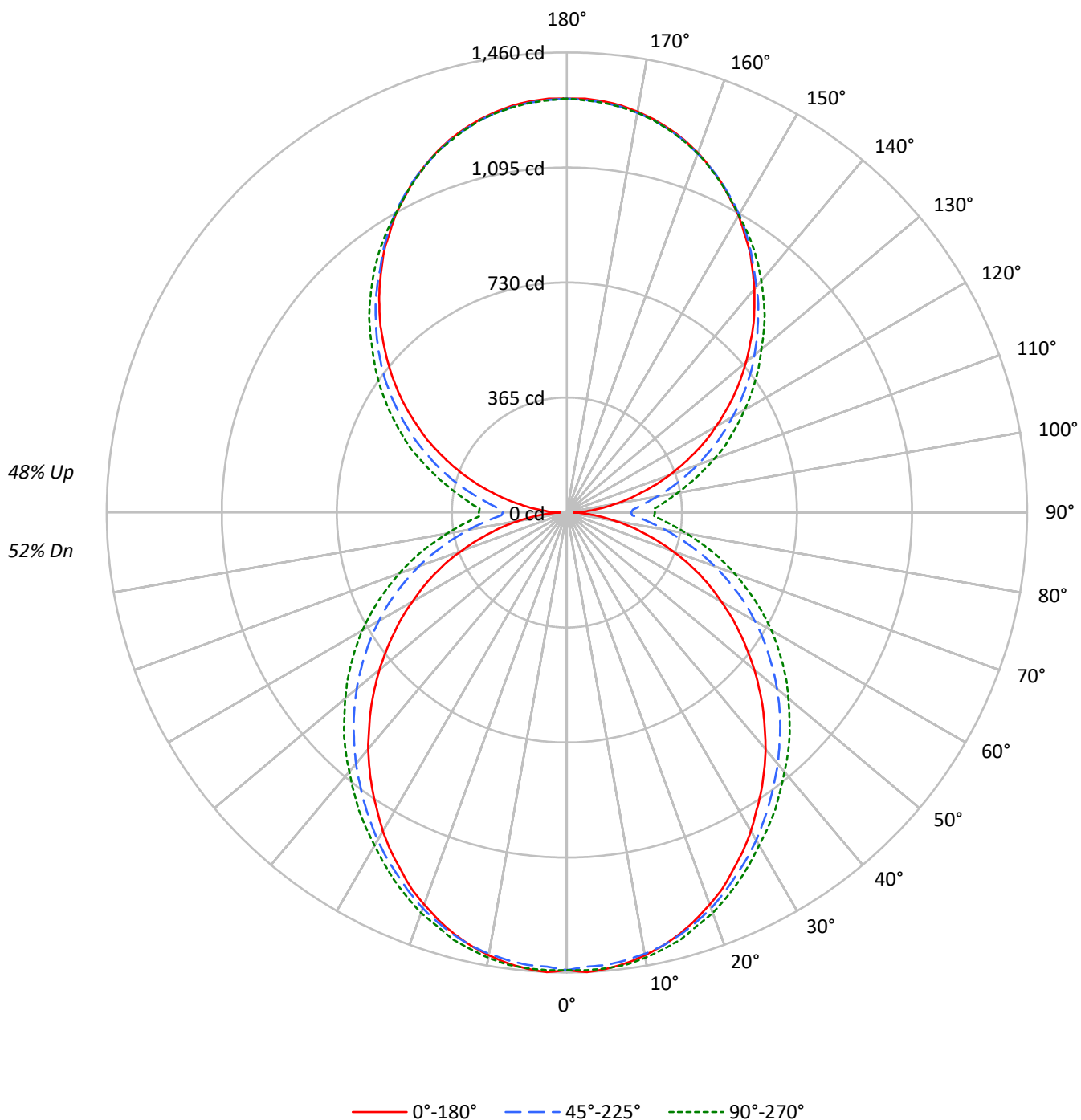
Lumens per Lamp: N/A
Luminaire Lumens: 8524.0 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 92.8
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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58
1	97	92	88	84	90	86	82	78	73	70	67	61	59	57	50	48	47
2	88	80	73	68	81	74	68	63	63	59	55	53	50	47	43	41	39
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	33
4	73	62	53	47	67	57	50	44	49	43	39	41	37	33	34	30	28
5	67	55	46	40	62	51	43	38	44	38	33	37	32	29	30	27	24
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	24	21
7	57	44	36	30	52	41	34	29	35	30	25	30	25	22	25	21	19
8	53	40	32	27	49	37	30	25	32	26	22	27	23	19	23	19	17
9	49	37	29	24	45	34	27	22	30	24	20	25	21	17	21	18	15
10	46	34	26	21	42	31	25	20	27	22	18	23	19	16	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15632	15632	15632
5°	15675	15174	15162
10°	15529	14763	14650
15°	15323	14310	14108
20°	15032	13803	13526
25°	14672	13234	12922
30°	14306	12718	12317
35°	13893	12177	11822
40°	13500	11682	11301
45°	13063	11204	10872
50°	12632	10728	10406
55°	12154	10242	9976
60°	11687	9744	9537
65°	11204	9214	9022
70°	10484	8617	8492
75°	9567	7939	7945
80°	8502	7252	7320
85°	7444	6697	6873

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13063 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.8	1.6
10°-20°	392.8	4.6
20°-30°	587.3	6.9
30°-40°	701.2	8.2
40°-50°	733.7	8.6
50°-60°	688.5	8.1
60°-70°	575.1	6.7
70°-80°	411.2	4.8
80°-90°	247.5	2.9
90°-100°	238.3	2.8
100°-110°	369.0	4.3
110°-120°	511.2	6.0
120°-130°	616.3	7.2
130°-140°	663.7	7.8
140°-150°	637.5	7.5
150°-160°	533.4	6.3
160°-170°	355.1	4.2
170°-180°	124.3	1.5
0°-30°	1117.9	13.1
0°-40°	1819.1	21.3
0°-60°	3241.3	38.0
0°-90°	4475.1	52.5
90°-120°	1118.6	13.1
90°-150°	3036.1	35.6
90°-180°	4049.0	47.5
0°-180°	8524.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1452	1452	1452	1452	1452	
5°	1454	1451	1441	1454	1452	138
15°	1384	1389	1388	1403	1402	390
25°	1250	1266	1270	1291	1291	576
35°	1076	1101	1122	1145	1152	673
45°	880	918	957	987	1000	678
55°	671	723	780	823	835	601
65°	464	525	595	642	658	458
75°	252	326	405	457	476	269
85°	78	157	240	294	310	80
90°	22	110	204	262	279	19
95°	78	147	233	286	302	81
105°	245	285	362	407	423	261
115°	446	469	523	562	574	442
125°	647	650	694	723	730	577
135°	836	841	857	881	887	644
145°	1012	1012	1016	1027	1029	632
155°	1157	1157	1158	1162	1155	533
165°	1260	1257	1257	1263	1256	355
175°	1311	1306	1306	1313	1306	125
180°	1314	1314	1314	1314	1314	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1452.3	1452.3	1452.3	1452.3	1452.3
2.5°	1460.3	1455.5	1442.8	1455.5	1453.9
5°	1453.9	1450.8	1441.3	1453.9	1452.3
7.5°	1442.8	1442.8	1433.4	1449.2	1447.6
10°	1427.0	1430.2	1422.3	1438.1	1434.9
12.5°	1408.0	1412.8	1408.0	1422.3	1419.1
15°	1384.3	1389.1	1387.5	1403.3	1401.7
17.5°	1355.8	1365.3	1363.7	1378.0	1374.8
20°	1324.2	1333.7	1336.8	1351.1	1352.7
22.5°	1291.0	1300.5	1305.2	1324.2	1322.6
25°	1249.8	1265.7	1270.4	1291.0	1291.0
27.5°	1210.3	1227.7	1237.2	1254.6	1256.2
30°	1167.6	1188.1	1200.8	1219.8	1219.8
32.5°	1120.1	1143.8	1161.2	1181.8	1186.6
35°	1075.8	1101.1	1121.7	1145.4	1151.7
37.5°	1028.3	1056.8	1080.6	1107.4	1112.2
40°	980.9	1009.4	1041.0	1067.9	1074.2
42.5°	928.7	965.1	998.3	1028.3	1037.8
45°	879.6	917.6	957.2	987.2	999.9
47.5°	827.4	870.1	914.4	947.7	957.2
50°	776.8	821.1	870.1	906.5	917.6
52.5°	723.0	770.5	825.8	863.8	878.0
55°	670.8	723.0	780.0	822.7	835.3
57.5°	620.2	674.0	735.7	778.4	792.6
60°	566.4	623.3	688.2	732.5	749.9
62.5°	515.8	574.3	643.9	688.2	704.0
65°	463.5	525.2	594.9	642.3	658.1
67.5°	411.3	476.2	545.8	598.0	610.7
70°	356.0	424.0	499.9	550.6	566.4
72.5°	305.3	373.4	452.5	504.7	520.5
75°	251.5	325.9	405.0	457.2	476.2
77.5°	205.7	280.0	359.1	414.5	428.7
80°	156.6	234.1	316.4	370.2	386.0
82.5°	113.9	193.0	276.9	330.7	346.5
85°	77.5	156.6	240.5	294.3	310.1
87.5°	47.5	126.6	207.3	261.0	276.9
90°	21.6	109.5	203.6	261.5	279.4
92.5°	50.0	124.2	209.4	264.7	277.0
95°	78.3	147.2	233.0	286.2	302.0
97.5°	115.9	178.1	258.6	311.2	326.0
100°	154.6	211.4	289.3	338.3	356.2
102.5°	199.5	246.9	325.2	372.6	387.5
105°	244.9	284.9	362.3	406.6	422.8
107.5°	297.0	331.2	400.2	446.0	459.2
110°	344.9	375.5	440.8	486.1	496.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	396.5	419.6	479.8	524.5	538.8
115°	446.5	468.6	523.4	562.5	574.1
117.5°	499.1	512.9	564.6	602.5	612.1
120°	546.1	560.1	607.2	642.6	651.6
122.5°	596.6	603.9	650.9	682.6	690.6
125°	646.6	649.7	693.6	722.6	729.6
127.5°	694.1	698.8	736.2	761.7	768.6
130°	741.6	748.3	776.8	802.8	805.1
132.5°	787.5	795.8	817.4	840.8	846.6
135°	836.0	840.6	857.0	881.4	887.2
137.5°	880.4	884.0	898.2	918.3	923.1
140°	925.3	930.4	936.2	958.9	959.6
142.5°	967.6	971.1	973.2	992.8	995.5
145°	1012.0	1012.4	1015.5	1027.2	1029.4
147.5°	1048.5	1052.7	1055.8	1060.5	1060.7
150°	1088.8	1090.9	1092.9	1092.9	1089.9
152.5°	1121.8	1124.9	1125.9	1128.0	1122.8
155°	1156.9	1156.9	1157.9	1162.1	1154.8
157.5°	1186.8	1185.8	1186.8	1191.0	1184.8
160°	1214.7	1212.6	1212.6	1217.8	1213.7
162.5°	1239.5	1236.4	1237.4	1242.6	1235.3
165°	1260.1	1257.0	1257.0	1263.2	1256.0
167.5°	1277.7	1273.5	1274.6	1280.7	1274.6
170°	1292.1	1288.0	1288.0	1295.2	1288.0
172.5°	1303.5	1299.3	1299.3	1305.5	1298.3
175°	1310.7	1306.5	1306.5	1312.7	1305.5
177.5°	1314.8	1310.7	1310.7	1316.9	1309.6
180°	1313.8	1313.8	1313.8	1313.8	1313.8

(END OF REPORT)