

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: P1030719

Luminaire Tested: S123DIW-B1165D1030UB2750-4F0-XX-W2A-D1_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1030719
REPORT IS A COMBINATION OF REPORTS P990865 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1030UB2750-4F0-XX-W2A-D1_5000K
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

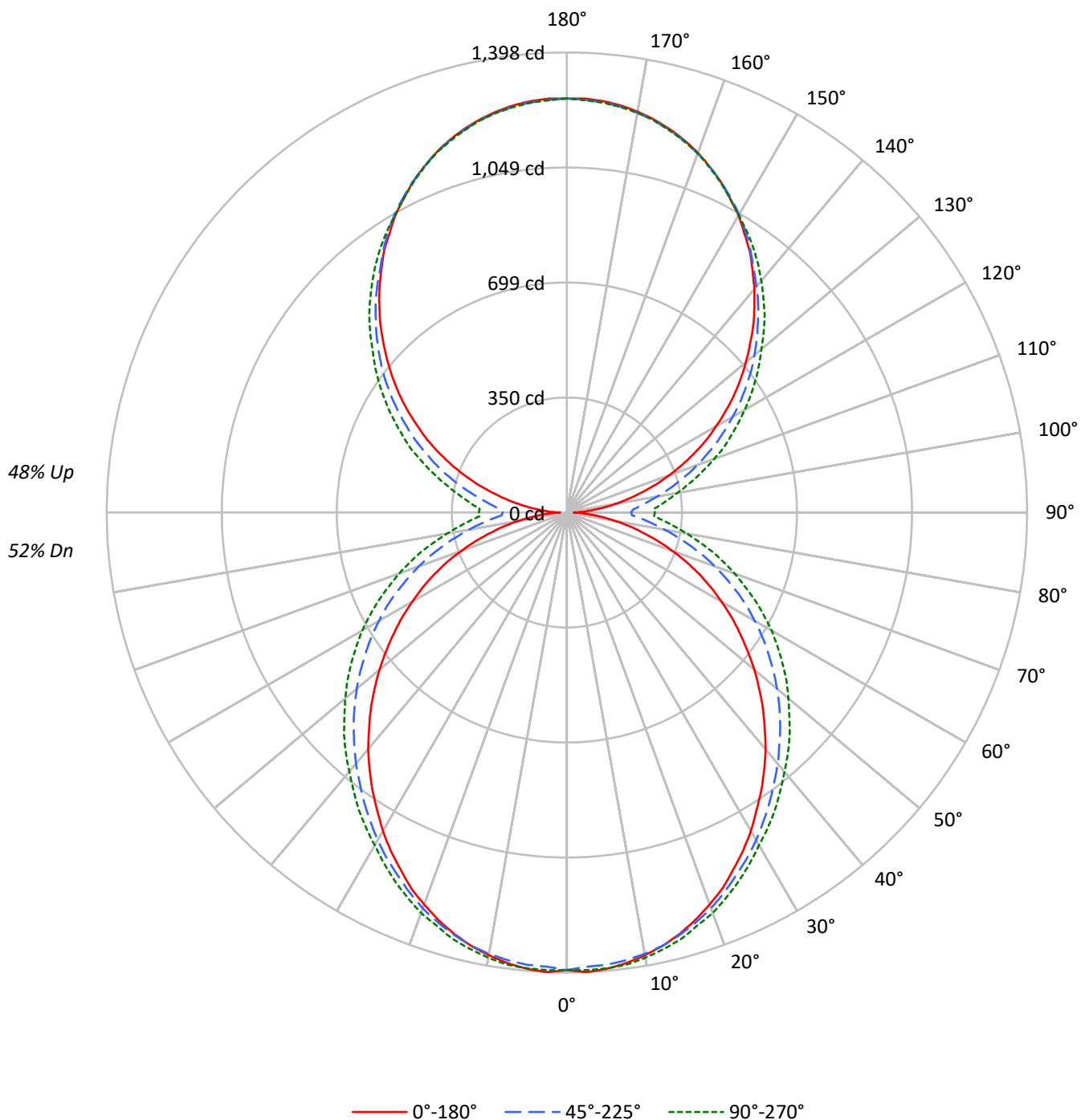
Lumens per Lamp: N/A
Luminaire Lumens: 8161.0 lumens
Efficiency: N/A
Efficacy: 87.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1030719

CATALOG NUMBER: S123DIW-B1165D1030UB2750-4F0-XX-W2A-D1_5000K

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				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		0
RCR																	
0	108	108	108	108	100	100	100	100	85	85	85		71	71	71		58
1	97	92	88	84	90	86	82	78	73	70	67		61	59	57		50
2	88	80	73	68	81	74	68	63	63	59	55		53	50	47		43
3	80	70	62	56	74	65	58	53	55	50	46		46	42	39		38
4	73	62	53	47	67	57	50	44	49	43	39		41	37	33		34
5	67	55	46	40	62	51	43	38	44	38	33		37	32	29		30
6	62	49	41	35	57	46	38	33	39	33	29		33	28	25		27
7	57	44	36	30	52	41	34	29	35	30	25		30	25	22		25
8	53	40	32	27	49	37	30	25	32	26	22		27	23	19		23
9	49	37	29	24	45	34	27	22	30	24	20		25	21	17		21
10	46	34	26	21	42	31	25	20	27	22	18		23	19	16		20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14966	14966	14966
5°	15008	14527	14515
10°	14867	14134	14026
15°	14670	13699	13507
20°	14391	13215	12949
25°	14048	12670	12372
30°	13696	12176	11792
35°	13302	11658	11319
40°	12924	11183	10819
45°	12506	10726	10409
50°	12093	10272	9962
55°	11636	9805	9551
60°	11188	9329	9130
65°	10728	8820	8638
70°	10036	8250	8130
75°	9160	7602	7606
80°	8143	6943	7009
85°	7127	6410	6581

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12506 cd/sqm

TEST NUMBER: P1030719

CATALOG NUMBER: S123DIW-B1165D1030UB2750-4F0-XX-W2A-D1_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	1.6
10°-20°	376.0	4.6
20°-30°	562.3	6.9
30°-40°	671.4	8.2
40°-50°	702.4	8.6
50°-60°	659.2	8.1
60°-70°	550.6	6.7
70°-80°	393.7	4.8
80°-90°	236.9	2.9
90°-100°	228.2	2.8
100°-110°	353.3	4.3
110°-120°	489.5	6.0
120°-130°	590.1	7.2
130°-140°	635.5	7.8
140°-150°	610.4	7.5
150°-160°	510.7	6.3
160°-170°	340.0	4.2
170°-180°	119.0	1.5
0°-30°	1070.2	13.1
0°-40°	1741.6	21.3
0°-60°	3103.2	38.0
0°-90°	4284.4	52.5
90°-120°	1070.9	13.1
90°-150°	2906.9	35.6
90°-180°	3877.0	47.5
0°-180°	8161.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1392	1389	1380	1392	1390	132
15°	1325	1330	1328	1344	1342	373
25°	1197	1212	1216	1236	1236	552
35°	1030	1054	1074	1097	1103	644
45°	842	878	916	945	957	649
55°	642	692	747	788	800	575
65°	444	503	570	615	630	439
75°	241	312	388	438	456	257
85°	74	150	230	282	297	76
90°	21	105	195	250	267	18
95°	75	141	223	274	289	77
105°	234	273	347	389	405	250
115°	428	449	501	538	550	424
125°	619	622	664	692	699	553
135°	800	805	821	844	849	617
145°	969	969	972	983	986	605
155°	1108	1108	1109	1113	1106	510
165°	1206	1204	1204	1210	1202	340
175°	1255	1251	1251	1257	1250	119
180°	1258	1258	1258	1258	1258	

TEST NUMBER: P1030719

CATALOG NUMBER: S123DIW-B1165D1030UB2750-4F0-XX-W2A-D1_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1390.4	1390.4	1390.4	1390.4	1390.4
2.5°	1398.0	1393.5	1381.4	1393.5	1392.0
5°	1392.0	1388.9	1379.8	1392.0	1390.4
7.5°	1381.4	1381.4	1372.3	1387.4	1385.9
10°	1366.2	1369.2	1361.7	1376.8	1373.8
12.5°	1348.0	1352.6	1348.0	1361.7	1358.6
15°	1325.3	1329.9	1328.3	1343.5	1342.0
17.5°	1298.1	1307.1	1305.6	1319.3	1316.2
20°	1267.8	1276.9	1279.9	1293.5	1295.0
22.5°	1236.0	1245.0	1249.6	1267.8	1266.2
25°	1196.6	1211.7	1216.3	1236.0	1236.0
27.5°	1158.7	1175.4	1184.5	1201.1	1202.6
30°	1117.8	1137.5	1149.6	1167.8	1167.8
32.5°	1072.4	1095.1	1111.8	1131.4	1136.0
35°	1030.0	1054.2	1073.9	1096.6	1102.7
37.5°	984.5	1011.8	1034.5	1060.3	1064.8
40°	939.1	966.3	996.6	1022.4	1028.4
42.5°	889.1	923.9	955.7	984.5	993.6
45°	842.1	878.5	916.4	945.1	957.3
47.5°	792.2	833.1	875.5	907.3	916.4
50°	743.7	786.1	833.1	867.9	878.5
52.5°	692.2	737.6	790.6	827.0	840.6
55°	642.2	692.2	746.7	787.6	799.7
57.5°	593.7	645.2	704.3	745.2	758.8
60°	542.2	596.8	658.9	701.3	717.9
62.5°	493.8	549.8	616.5	658.9	674.0
65°	443.8	502.9	569.5	614.9	630.1
67.5°	393.8	455.9	522.6	572.5	584.7
70°	340.8	405.9	478.6	527.1	542.2
72.5°	292.3	357.5	433.2	483.2	498.3
75°	240.8	312.0	387.8	437.7	455.9
77.5°	196.9	268.1	343.8	396.8	410.5
80°	150.0	224.2	302.9	354.4	369.6
82.5°	109.1	184.8	265.1	316.6	331.7
85°	74.2	150.0	230.2	281.7	296.9
87.5°	45.4	121.2	198.4	249.9	265.1
90°	20.7	104.8	194.9	250.4	267.4
92.5°	47.8	118.9	200.5	253.5	265.2
95°	75.0	140.9	223.1	274.0	289.2
97.5°	110.9	170.5	247.6	298.0	312.1
100°	148.0	202.4	277.1	323.9	341.0
102.5°	190.9	236.3	311.4	356.8	370.9
105°	234.4	272.8	346.8	389.2	404.8
107.5°	284.3	317.1	383.1	427.0	439.6
110°	330.2	359.5	422.0	465.3	475.5

TEST NUMBER: P1030719

CATALOG NUMBER: S123DIW-B1165D1030UB2750-4F0-XX-W2A-D1_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	379.6	401.8	459.3	502.2	515.8
115°	427.6	448.6	501.2	538.5	549.6
117.5°	477.9	491.0	540.6	576.9	586.1
120°	522.9	536.3	581.4	615.3	623.9
122.5°	571.3	578.3	623.2	653.6	661.3
125°	619.1	622.1	664.1	691.9	698.6
127.5°	664.6	669.0	704.9	729.3	735.9
130°	710.0	716.4	743.8	768.6	770.8
132.5°	754.0	761.9	782.6	805.0	810.6
135°	800.4	804.8	820.6	843.8	849.4
137.5°	842.9	846.3	859.9	879.3	883.8
140°	885.9	890.8	896.4	918.1	918.8
142.5°	926.4	929.8	931.8	950.5	953.2
145°	968.9	969.3	972.3	983.4	985.6
147.5°	1003.9	1007.9	1010.8	1015.3	1015.5
150°	1042.5	1044.4	1046.4	1046.4	1043.5
152.5°	1074.1	1077.0	1078.0	1080.0	1075.1
155°	1107.7	1107.7	1108.7	1112.6	1105.7
157.5°	1136.3	1135.3	1136.3	1140.3	1134.4
160°	1163.0	1161.0	1161.0	1166.0	1162.0
162.5°	1186.7	1183.8	1184.8	1189.7	1182.8
165°	1206.5	1203.5	1203.5	1209.5	1202.5
167.5°	1223.3	1219.3	1220.3	1226.3	1220.3
170°	1237.1	1233.2	1233.2	1240.1	1233.2
172.5°	1248.0	1244.0	1244.0	1250.0	1243.1
175°	1254.9	1251.0	1251.0	1256.9	1250.0
177.5°	1258.9	1254.9	1254.9	1260.8	1253.9
180°	1257.9	1257.9	1257.9	1257.9	1257.9

(END OF REPORT)