

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: P1029444

Luminaire Tested: S122DIW-B290D970UB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029444
REPORT IS A COMBINATION OF REPORTS P985877 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B290D970UB2750-4F0-XX-W2A-F_2700K
Description: Define 2 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

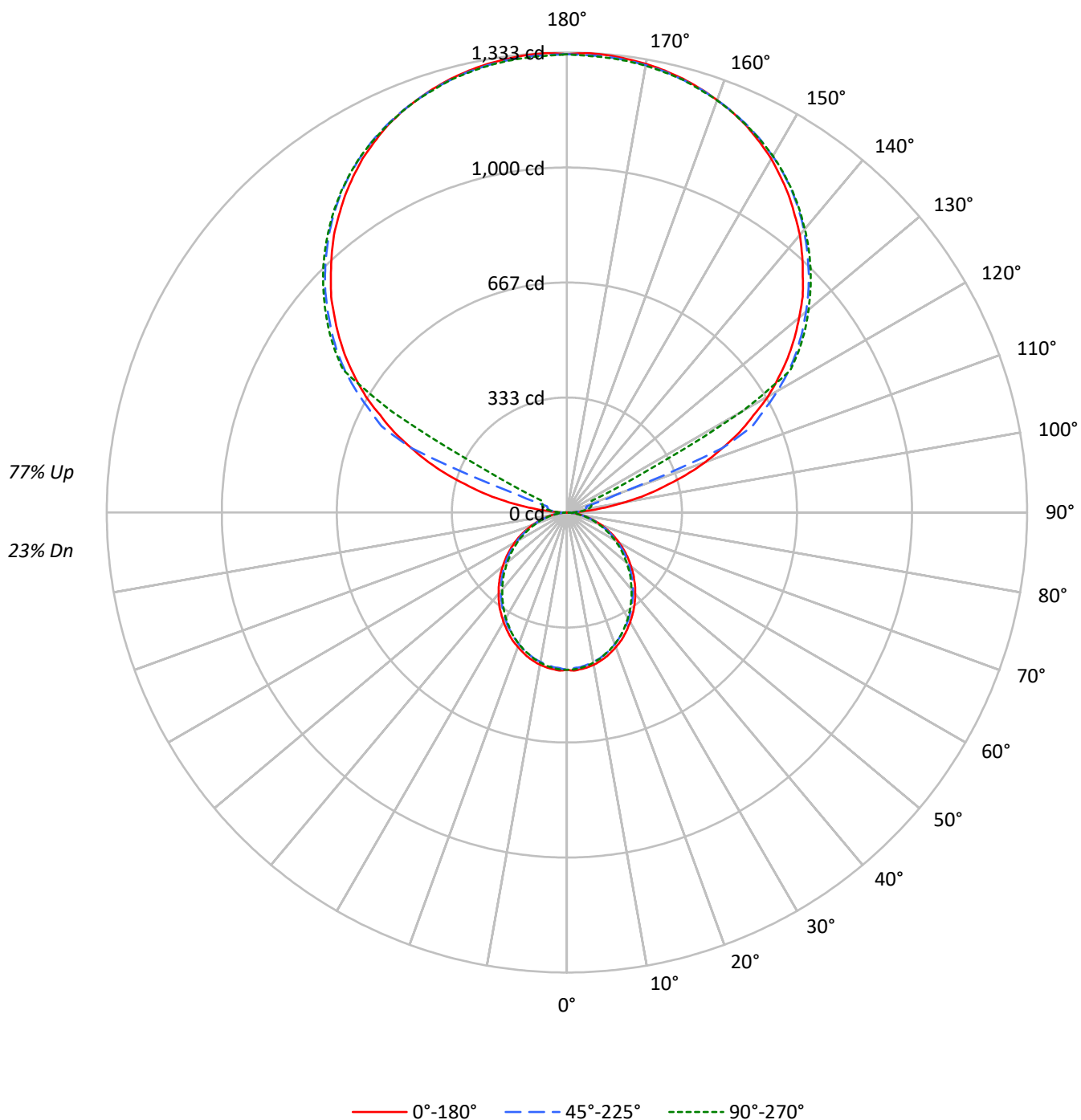
Lumens per Lamp: N/A
Luminaire Lumens: 5055.0 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
Input Voltage (V):
Input Current (A_{in}): 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	50	30	10
RCR																				
0	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	31	31	23
1	92	88	84	80	81	78	75	72	60	58	56	43	42	41	28	27	26	26	26	19
2	83	76	71	66	74	68	63	59	52	49	46	38	36	34	24	23	22	22	22	16
3	76	67	60	55	67	60	54	49	46	42	39	33	31	29	22	20	19	19	19	14
4	70	59	52	46	61	53	46	42	41	36	33	30	27	24	19	18	16	16	16	12
5	64	53	45	39	56	47	40	35	36	32	28	26	23	21	17	16	14	14	14	10
6	58	47	39	34	52	42	35	31	33	28	24	24	21	18	16	14	12	12	12	9
7	54	42	35	29	48	38	31	27	29	25	21	22	18	16	14	12	11	11	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10	10	10	7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9	9	9	6
10	43	32	25	20	38	28	22	18	22	18	15	17	14	11	11	9	8	8	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7217	7217	7217
5°	7228	6880	6831
10°	7171	6566	6435
15°	7065	6250	6021
20°	6923	5907	5626
25°	6781	5548	5234
30°	6604	5210	4822
35°	6436	4855	4417
40°	6230	4503	4033
45°	6023	4155	3658
50°	5797	3801	3269
55°	5561	3422	2899
60°	5295	3012	2517
65°	5002	2595	2113
70°	4634	2139	1707
75°	4123	1649	1317
80°	3497	1120	847
85°	2543	521	360

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6023 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	0.8
10°-20°	120.7	2.4
20°-30°	177.4	3.5
30°-40°	206.1	4.1
40°-50°	205.8	4.1
50°-60°	179.5	3.6
60°-70°	132.7	2.6
70°-80°	75.1	1.5
80°-90°	22.1	0.4
90°-100°	43.8	0.9
100°-110°	163.2	3.2
110°-120°	432.9	8.6
120°-130°	718.0	14.2
130°-140°	762.6	15.1
140°-150°	708.8	14.0
150°-160°	569.8	11.3
160°-170°	367.2	7.3
170°-180°	126.4	2.5
0°-30°	341.1	6.7
0°-40°	547.2	10.8
0°-60°	932.5	18.4
0°-90°	1162.3	23.0
90°-120°	639.9	12.7
90°-150°	2829.3	56.0
90°-180°	3893.0	77.0
0°-180°	5055.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	456	456	456	456	456	
5°	456	454	449	453	452	43
15°	434	431	426	427	425	122
25°	393	389	382	383	382	181
35°	339	334	328	325	323	212
45°	276	273	266	261	260	213
55°	209	206	201	196	193	187
65°	141	138	134	130	128	139
75°	74	73	71	68	69	79
85°	18	18	17	16	15	20
90°	1	12	19	24	26	5
95°	62	31	38	42	41	74
105°	292	321	59	69	73	312
115°	552	569	593	148	79	544
125°	781	794	812	819	822	697
135°	967	982	991	1000	998	747
145°	1121	1120	1137	1143	1138	701
155°	1235	1226	1238	1243	1236	569
165°	1301	1295	1298	1305	1298	368
175°	1331	1324	1326	1333	1323	127
180°	1328	1328	1328	1328	1328	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	455.9	455.9	455.9	455.9	455.9
2.5°	458.6	456.4	451.6	455.9	455.1
5°	455.9	454.2	449.4	452.9	452.0
7.5°	452.9	450.2	445.4	448.9	448.1
10°	448.1	445.0	439.7	443.2	441.9
12.5°	441.5	438.8	433.6	435.8	434.9
15°	434.0	431.4	425.7	427.4	425.3
17.5°	424.8	422.2	416.5	418.7	416.5
20°	414.7	412.1	406.0	407.3	405.5
22.5°	404.7	400.7	395.0	395.0	394.1
25°	392.8	389.3	381.9	382.7	381.9
27.5°	379.7	376.6	370.9	369.6	367.4
30°	366.5	363.0	356.4	355.1	353.4
32.5°	352.5	349.9	342.8	340.2	338.5
35°	338.9	334.5	327.5	324.9	322.7
37.5°	323.5	319.6	312.6	309.5	307.3
40°	307.8	304.3	297.2	293.3	291.5
42.5°	292.4	288.9	281.9	277.5	274.9
45°	275.8	272.7	266.1	261.3	259.5
47.5°	259.5	256.5	249.5	244.6	242.0
50°	242.4	240.2	234.1	228.0	225.8
52.5°	225.8	222.7	217.0	212.2	209.1
55°	208.7	206.1	200.8	195.5	193.3
57.5°	191.6	189.4	183.7	178.4	176.7
60°	174.5	172.7	166.6	161.8	160.5
62.5°	157.8	154.8	150.4	146.0	144.2
65°	140.7	138.1	133.7	129.8	127.6
67.5°	123.2	121.0	117.1	114.0	112.2
70°	107.0	105.2	101.3	98.2	96.5
72.5°	90.3	88.6	86.4	83.3	82.0
75°	73.7	72.8	70.6	68.0	68.8
77.5°	58.7	57.0	56.1	54.8	53.5
80°	43.8	43.4	42.5	41.2	40.3
82.5°	29.8	29.8	29.4	27.6	27.6
85°	18.0	17.5	17.1	15.8	15.3
87.5°	7.9	7.0	6.1	4.8	4.4
90°	1.0	11.5	19.2	24.0	25.9
92.5°	24.0	20.2	23.1	25.0	25.9
95°	62.5	30.7	37.5	42.3	41.3
97.5°	112.4	33.6	49.0	51.9	52.8
100°	170.1	38.4	54.8	62.5	64.4
102.5°	233.5	231.5	56.7	67.3	70.1
105°	292.1	320.9	58.6	69.2	73.0
107.5°	360.3	384.3	60.5	71.1	74.9
110°	425.6	445.8	168.1	72.1	75.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	487.1	504.4	488.1	74.0	76.9
115°	552.5	568.8	592.8	148.0	78.8
117.5°	609.1	628.4	644.7	507.3	255.6
120°	672.6	687.0	704.3	715.8	586.1
122.5°	726.4	741.7	760.9	766.7	767.7
125°	781.1	793.6	811.9	818.6	821.5
127.5°	831.1	844.5	858.9	868.6	869.5
130°	878.2	893.5	904.1	914.7	913.7
132.5°	926.2	938.7	949.3	957.9	956.9
135°	966.6	981.9	990.6	1000.2	998.3
137.5°	1008.8	1020.4	1030.0	1039.6	1036.7
140°	1050.1	1057.8	1068.4	1077.0	1072.2
142.5°	1084.7	1091.5	1103.9	1111.6	1106.8
145°	1121.2	1120.3	1136.6	1143.3	1138.5
147.5°	1152.9	1150.1	1166.4	1171.2	1167.4
150°	1183.7	1177.0	1192.3	1198.1	1193.3
152.5°	1209.6	1201.9	1216.4	1222.1	1215.4
155°	1234.6	1226.0	1237.5	1243.3	1235.6
157.5°	1254.8	1247.1	1255.7	1262.5	1254.8
160°	1272.1	1266.3	1272.1	1277.8	1271.1
162.5°	1287.5	1281.7	1286.5	1293.2	1284.6
165°	1300.9	1295.1	1298.0	1304.7	1298.0
167.5°	1311.5	1305.7	1308.6	1315.3	1306.7
170°	1320.1	1314.4	1316.3	1323.0	1314.4
172.5°	1325.9	1320.1	1322.0	1328.8	1320.1
175°	1330.7	1324.0	1325.9	1332.6	1323.0
177.5°	1332.6	1325.9	1326.8	1333.6	1324.9
180°	1327.8	1327.8	1327.8	1327.8	1327.8

(END OF REPORT)