

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: P1029435

Luminaire Tested: S122DIW-B290D970UB2750-4F0-XX-W2A-D_2700K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029435
REPORT IS A COMBINATION OF REPORTS P985862 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-D_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

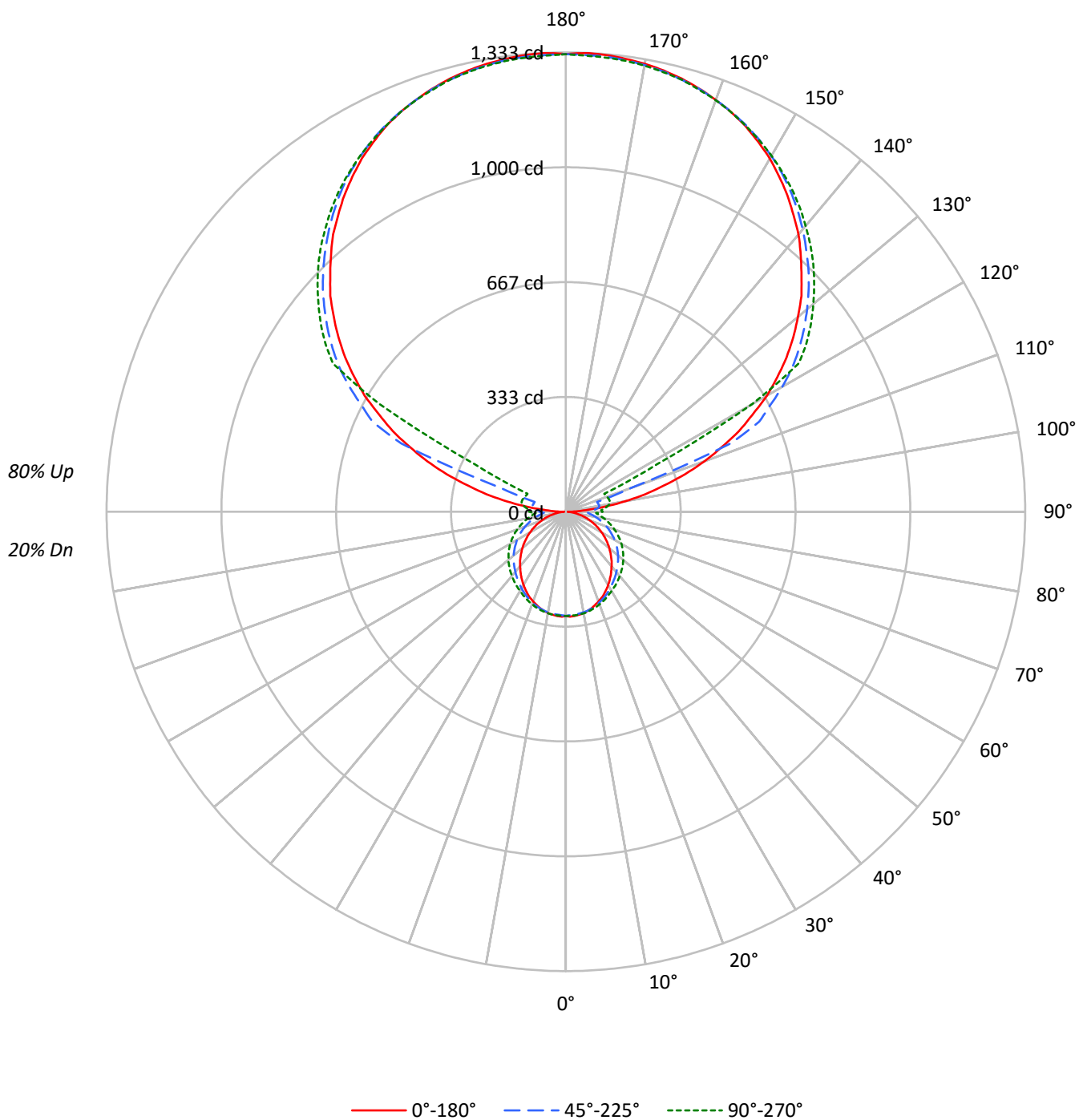
Lumens per Lamp: N/A
Luminaire Lumens: 5049.0 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
Input Voltage (V):
Input Current (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: P1029435

CATALOG NUMBER: S122DIW-B290D970UB2750-4F0-XX-W2A-D_2700K

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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29
1	91	86	82	79	80	76	73	70	57	55	53	40	39	38	24	24	23
2	82	75	69	64	72	66	61	57	50	47	44	35	33	31	21	20	19
3	75	65	58	53	66	58	52	47	44	40	36	31	28	26	19	17	16
4	68	58	50	44	60	51	45	40	39	34	31	27	24	22	16	15	13
5	62	51	43	37	55	45	39	34	34	30	26	24	21	19	15	13	12
6	57	46	38	32	50	40	34	29	31	26	22	22	19	16	13	11	10
7	53	41	33	28	46	36	30	25	28	23	20	20	16	14	12	10	9
8	49	37	29	24	43	33	26	22	25	20	17	18	15	12	11	9	8
9	45	33	26	21	40	30	24	19	23	18	15	16	13	11	10	8	7
10	42	30	24	19	37	27	21	17	21	16	13	15	12	10	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4787	4787	4787
5°	4809	4584	4558
10°	4777	4424	4360
15°	4709	4261	4158
20°	4624	4088	3965
25°	4541	3923	3791
30°	4423	3755	3618
35°	4303	3593	3491
40°	4177	3453	3366
45°	4058	3326	3256
50°	3931	3210	3147
55°	3797	3085	3037
60°	3632	2956	2921
65°	3459	2806	2787
70°	3265	2648	2645
75°	3015	2488	2509
80°	2627	2322	2367
85°	2232	2165	2248

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4058 cd/sqm

TEST NUMBER: P1029435

CATALOG NUMBER: S122DIW-B290D970UB2750-4F0-XX-W2A-D_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.7	0.6
10°-20°	82.2	1.6
20°-30°	124.6	2.5
30°-40°	151.7	3.0
40°-50°	163.2	3.2
50°-60°	158.5	3.1
60°-70°	138.4	2.7
70°-80°	106.6	2.1
80°-90°	73.7	1.5
90°-100°	93.0	1.8
100°-110°	199.2	3.9
110°-120°	456.6	9.0
120°-130°	731.2	14.5
130°-140°	768.2	15.2
140°-150°	709.7	14.1
150°-160°	569.8	11.3
160°-170°	367.2	7.3
170°-180°	126.4	2.5
0°-30°	235.5	4.7
0°-40°	387.2	7.7
0°-60°	709.0	14.0
0°-90°	1027.7	20.4
90°-120°	748.8	14.8
90°-150°	2957.9	58.6
90°-180°	4021.0	79.6
0°-180°	5049.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	302	302	302	302	302	
5°	303	302	299	302	302	29
15°	289	290	290	294	294	81
25°	263	266	270	275	277	121
35°	227	234	242	252	255	142
45°	186	198	213	227	231	143
55°	142	158	181	197	202	127
65°	97	119	145	163	168	97
75°	54	78	106	125	131	57
85°	16	43	71	89	96	17
90°	5	41	77	99	107	7
95°	66	55	88	109	114	77
105°	294	336	96	122	131	315
115°	554	575	619	187	123	545
125°	782	794	827	845	852	698
135°	967	982	995	1014	1016	747
145°	1121	1120	1137	1146	1143	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	

TEST NUMBER: P1029435

CATALOG NUMBER: S122DIW-B290D970UB2750-4F0-XX-W2A-D_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	302.4	302.4	302.4	302.4	302.4
2.5°	304.6	303.3	300.2	302.4	301.6
5°	303.3	302.0	299.4	302.0	301.6
7.5°	301.1	300.2	298.1	301.1	300.7
10°	298.5	297.6	296.3	299.8	299.4
12.5°	294.1	294.5	293.7	297.2	296.7
15°	289.3	290.2	290.2	294.1	293.7
17.5°	283.2	284.9	286.2	290.2	290.2
20°	277.0	279.2	281.0	285.8	285.8
22.5°	270.4	273.1	275.7	280.5	281.4
25°	263.0	266.1	270.0	275.3	276.6
27.5°	254.2	259.0	263.4	270.0	270.9
30°	245.5	251.2	256.9	263.9	265.2
32.5°	235.8	242.4	249.4	257.7	260.4
35°	226.6	234.1	242.4	252.0	255.1
37.5°	216.5	224.9	235.4	245.9	249.0
40°	206.4	216.1	227.9	239.3	243.3
42.5°	196.8	206.4	220.5	233.2	237.1
45°	185.8	197.7	213.0	226.6	231.0
47.5°	175.3	188.0	205.6	219.6	224.4
50°	164.4	178.0	197.7	212.6	217.4
52.5°	153.8	168.3	189.4	204.7	210.0
55°	142.5	158.2	181.0	196.8	202.5
57.5°	131.5	149.0	171.8	188.9	194.6
60°	119.7	138.5	163.5	180.1	186.3
62.5°	109.1	128.9	153.8	171.8	177.5
65°	97.3	118.8	144.6	162.6	168.3
67.5°	86.8	109.1	135.4	153.4	159.5
70°	75.4	98.2	125.4	144.2	149.5
72.5°	64.9	88.5	116.2	134.6	141.1
75°	53.9	78.5	106.5	125.4	131.1
77.5°	43.4	68.8	97.3	116.2	122.3
80°	32.9	59.6	88.1	106.5	112.6
82.5°	24.1	50.4	79.3	97.7	103.4
85°	15.8	43.0	71.0	89.4	95.6
87.5°	9.6	35.9	64.0	82.0	87.7
90°	5.4	41.3	77.1	99.4	106.6
92.5°	27.9	47.4	77.0	96.0	102.2
95°	66.0	54.8	87.9	109.4	113.6
97.5°	115.5	55.5	96.3	115.5	121.6
100°	173.2	57.7	98.6	122.5	129.3
102.5°	236.1	248.6	97.5	123.8	131.5
105°	294.3	335.8	96.3	122.2	130.9
107.5°	362.5	397.0	95.1	120.6	129.3
110°	427.4	456.3	200.1	118.1	126.7

TEST NUMBER: P1029435

CATALOG NUMBER: S122DIW-B290D970UB2750-4F0-XX-W2A-D_2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	488.9	513.2	517.0	117.0	124.7
115°	554.3	575.4	619.1	187.4	123.1
117.5°	610.4	633.2	667.9	543.7	296.4
120°	673.9	690.1	724.9	748.7	623.8
122.5°	727.7	743.5	778.9	796.5	801.5
125°	782.0	794.5	826.8	845.3	852.2
127.5°	832.0	844.9	871.2	891.8	896.7
130°	879.1	893.9	913.7	934.9	937.4
132.5°	927.1	939.1	956.3	975.0	977.5
135°	967.0	982.3	995.4	1014.2	1015.8
137.5°	1009.2	1020.8	1032.6	1050.6	1050.7
140°	1050.5	1057.8	1069.3	1084.9	1082.7
142.5°	1085.1	1091.5	1103.9	1116.9	1114.3
145°	1121.2	1120.3	1136.6	1145.9	1143.3
147.5°	1152.9	1150.1	1166.4	1171.6	1169.2
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)