

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: P1029438

Luminaire Tested: S122DIW-B290D970UB2750-4F0-XX-W2A-D_5000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029438
REPORT IS A COMBINATION OF REPORTS P985866 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_5000K
Description: Define 2 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

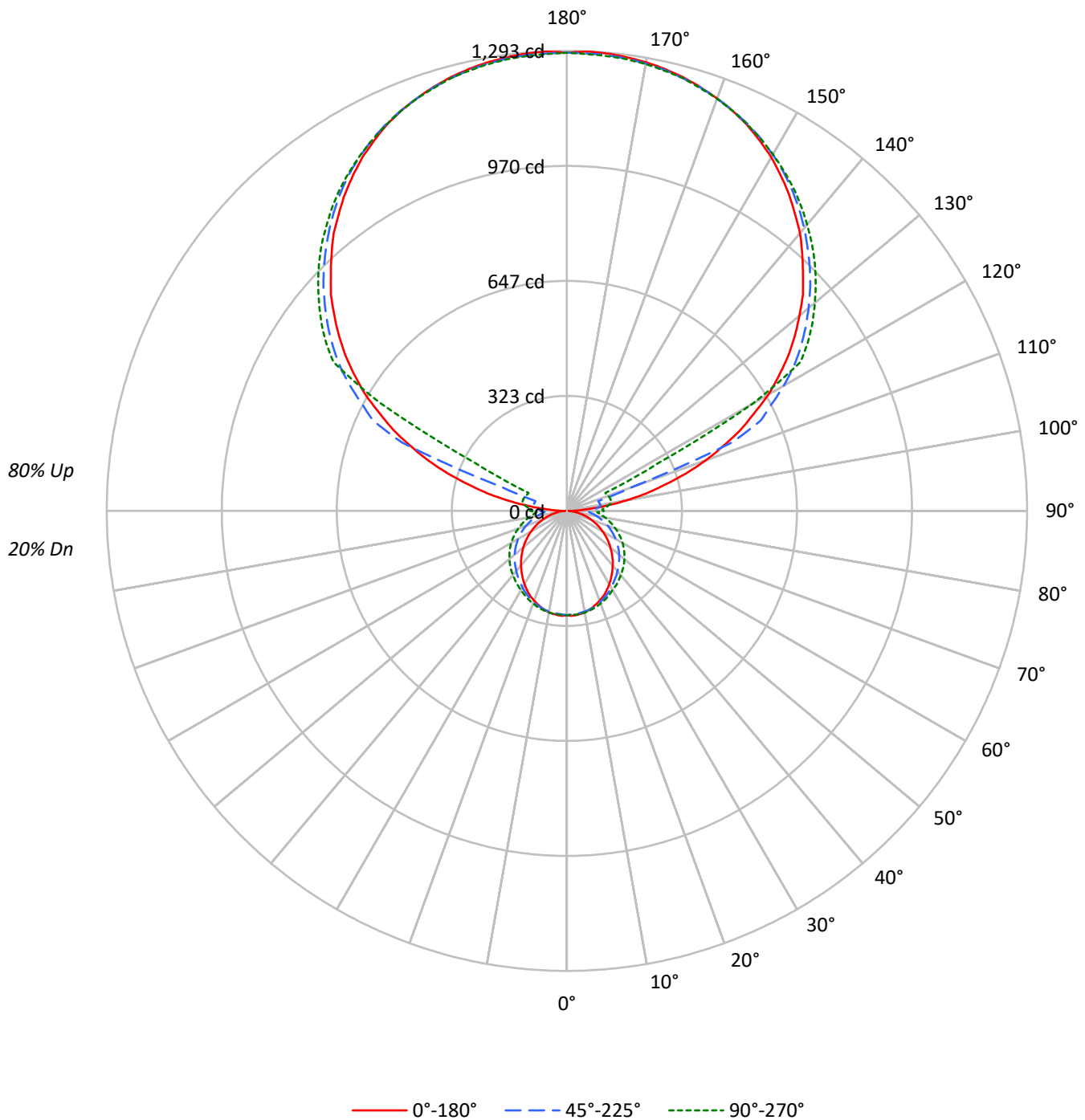
Lumens per Lamp: N/A
Luminaire Lumens: 4897.0 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	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°	4643	4643	4643
5°	4663	4444	4419
10°	4631	4290	4228
15°	4566	4131	4032
20°	4484	3963	3845
25°	4402	3803	3676
30°	4288	3641	3508
35°	4172	3483	3386
40°	4052	3348	3264
45°	3936	3226	3157
50°	3812	3112	3052
55°	3680	2991	2946
60°	3520	2866	2832
65°	3356	2723	2703
70°	3166	2568	2563
75°	2926	2413	2433
80°	2547	2250	2296
85°	2161	2101	2180

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3936 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.8	0.6
10°-20°	79.7	1.6
20°-30°	120.8	2.5
30°-40°	147.1	3.0
40°-50°	158.3	3.2
50°-60°	153.7	3.1
60°-70°	134.3	2.7
70°-80°	103.3	2.1
80°-90°	71.5	1.5
90°-100°	90.2	1.8
100°-110°	193.2	3.9
110°-120°	442.9	9.0
120°-130°	709.2	14.5
130°-140°	745.1	15.2
140°-150°	688.4	14.1
150°-160°	552.7	11.3
160°-170°	356.2	7.3
170°-180°	122.6	2.5
0°-30°	228.3	4.7
0°-40°	375.5	7.7
0°-60°	687.5	14.0
0°-90°	996.5	20.3
90°-120°	726.3	14.8
90°-150°	2869.1	58.6
90°-180°	3901.0	79.7
0°-180°	4897.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	293	293	293	293	293	
5°	294	293	290	293	292	28
15°	280	281	281	285	285	79
25°	255	258	262	267	268	117
35°	220	227	235	244	247	137
45°	180	192	207	220	224	139
55°	138	153	176	191	196	124
65°	94	115	140	158	163	94
75°	52	76	103	122	127	55
85°	15	42	69	87	93	16
90°	5	40	75	96	103	6
95°	64	53	85	106	110	74
105°	285	326	93	118	127	305
115°	538	558	600	182	119	529
125°	759	771	802	820	827	677
135°	938	953	966	984	985	725
145°	1088	1087	1102	1112	1109	680
155°	1198	1189	1200	1206	1198	552
165°	1262	1256	1259	1266	1259	356
175°	1291	1284	1286	1293	1283	123
180°	1288	1288	1288	1288	1288	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	293.3	293.3	293.3	293.3	293.3
2.5°	295.4	294.1	291.1	293.3	292.4
5°	294.1	292.8	290.3	292.8	292.4
7.5°	292.0	291.1	289.0	292.0	291.6
10°	289.4	288.6	287.3	290.7	290.3
12.5°	285.2	285.6	284.8	288.2	287.7
15°	280.5	281.4	281.4	285.2	284.8
17.5°	274.6	276.3	277.5	281.4	281.4
20°	268.6	270.7	272.4	277.1	277.1
22.5°	262.2	264.8	267.3	272.0	272.9
25°	255.0	258.0	261.8	266.9	268.2
27.5°	246.5	251.2	255.4	261.8	262.7
30°	238.0	243.5	249.1	255.9	257.1
32.5°	228.7	235.0	241.8	249.9	252.5
35°	219.7	227.0	235.0	244.4	247.4
37.5°	210.0	218.0	228.2	238.4	241.4
40°	200.2	209.5	221.0	232.1	235.9
42.5°	190.8	200.2	213.8	226.1	229.9
45°	180.2	191.7	206.6	219.7	224.0
47.5°	170.0	182.3	199.3	212.9	217.6
50°	159.4	172.6	191.7	206.1	210.8
52.5°	149.2	163.2	183.6	198.5	203.6
55°	138.1	153.4	175.5	190.8	196.4
57.5°	127.5	144.5	166.6	183.2	188.7
60°	116.0	134.3	158.5	174.7	180.6
62.5°	105.8	125.0	149.2	166.6	172.1
65°	94.4	115.2	140.3	157.7	163.2
67.5°	84.2	105.8	131.3	148.8	154.7
70°	73.1	95.2	121.6	139.8	144.9
72.5°	62.9	85.9	112.6	130.5	136.9
75°	52.3	76.1	103.3	121.6	127.1
77.5°	42.1	66.7	94.4	112.6	118.6
80°	31.9	57.8	85.4	103.3	109.2
82.5°	23.4	48.9	76.9	94.8	100.3
85°	15.3	41.7	68.9	86.7	92.7
87.5°	9.4	34.9	62.1	79.5	85.0
90°	5.2	40.1	74.7	96.4	103.4
92.5°	27.1	46.0	74.7	93.1	99.2
95°	64.0	53.2	85.2	106.0	110.2
97.5°	112.0	53.9	93.4	111.9	118.0
100°	168.0	56.0	95.6	118.8	125.3
102.5°	229.1	241.2	94.5	120.0	127.5
105°	285.4	325.8	93.4	118.5	126.9
107.5°	351.6	385.1	92.3	117.0	125.4
110°	414.5	442.6	194.1	114.5	122.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	474.2	497.8	501.5	113.5	120.9
115°	537.6	558.1	600.5	181.8	119.3
117.5°	592.1	614.2	647.8	527.4	287.4
120°	653.6	669.3	703.1	726.2	605.1
122.5°	705.8	721.1	755.5	772.6	777.3
125°	758.6	770.7	802.0	819.9	826.6
127.5°	807.0	819.6	845.0	865.0	869.8
130°	852.7	867.1	886.3	906.8	909.3
132.5°	899.3	910.9	927.5	945.7	948.2
135°	937.9	952.8	965.5	983.7	985.3
137.5°	978.9	990.1	1001.6	1018.9	1019.1
140°	1019.0	1026.1	1037.2	1052.4	1050.2
142.5°	1052.5	1058.7	1070.8	1083.3	1080.8
145°	1087.6	1086.6	1102.5	1111.6	1109.0
147.5°	1118.3	1115.5	1131.4	1136.4	1134.0
150°	1148.1	1141.6	1156.5	1162.1	1157.5
152.5°	1173.3	1165.8	1179.8	1185.4	1178.9
155°	1197.5	1189.1	1200.3	1205.9	1198.5
157.5°	1217.1	1209.6	1218.0	1224.6	1217.1
160°	1233.9	1228.3	1233.9	1239.5	1232.9
162.5°	1248.8	1243.2	1247.8	1254.4	1246.0
165°	1261.8	1256.2	1259.0	1265.6	1259.0
167.5°	1272.1	1266.5	1269.3	1275.8	1267.4
170°	1280.5	1274.9	1276.7	1283.3	1274.9
172.5°	1286.1	1280.5	1282.3	1288.9	1280.5
175°	1290.7	1284.2	1286.1	1292.6	1283.3
177.5°	1292.6	1286.1	1287.0	1293.5	1285.1
180°	1287.9	1287.9	1287.9	1287.9	1287.9

(END OF REPORT)