

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: P1029581

Luminaire Tested: S122DIW-B485D970UB2750-4F0-XX-W2A-D1_5000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029581
REPORT IS A COMBINATION OF REPORTS P986306 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B485D970UB2750-4F0-XX-W2A-D1_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

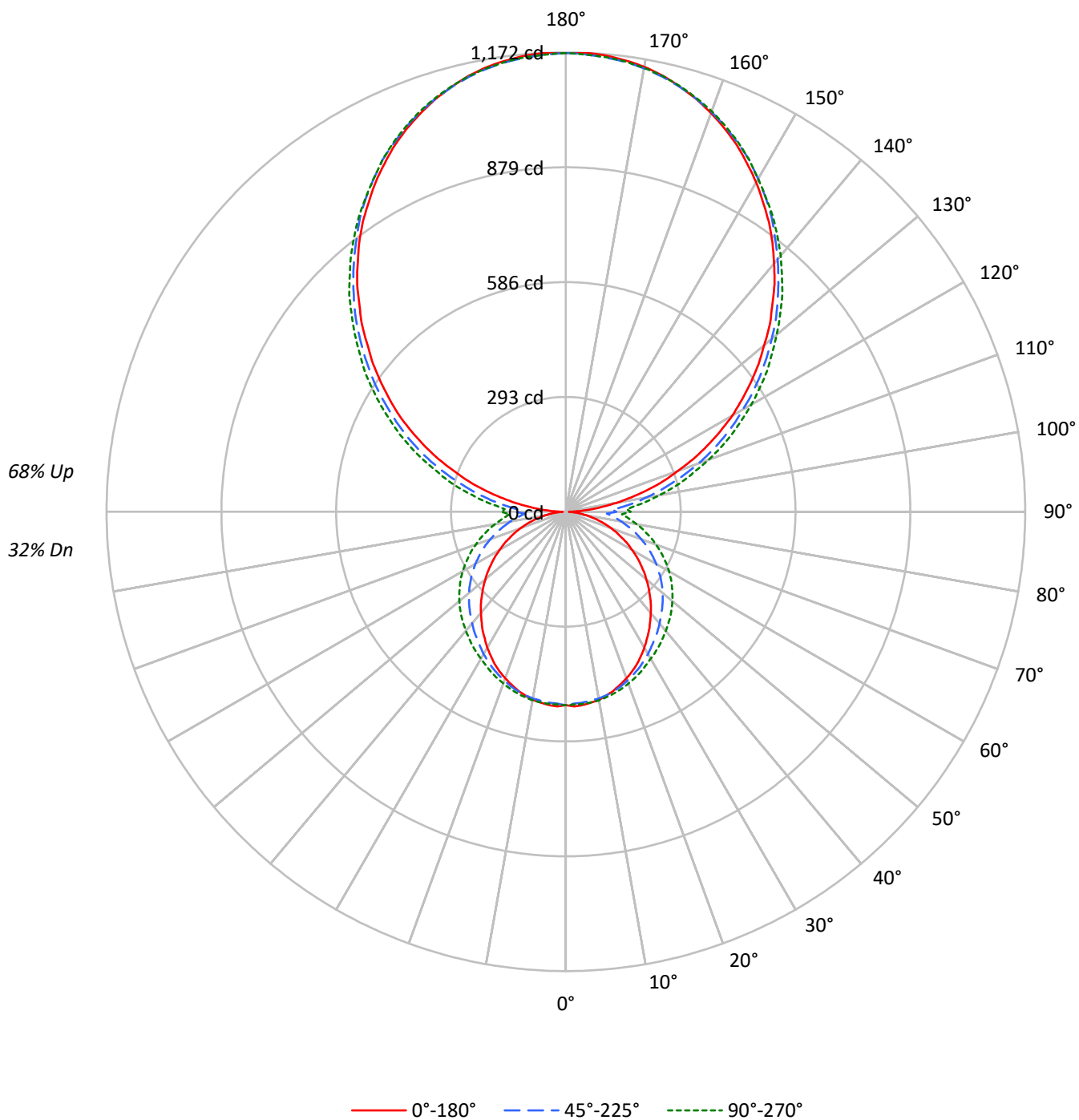
Lumens per Lamp: N/A
Luminaire Lumens: 5159.0 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.5
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: P1029581

CATALOG NUMBER: S122DIW-B485D970UB2750-4F0-XX-W2A-D1_5000K

Luminous Intensity Polar Plot



TEST NUMBER: P1029581

CATALOG NUMBER: S122DIW-B485D970UB2750-4F0-XX-W2A-D1_5000K

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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	40	40	32
1	93	88	84	80	83	79	76	73	63	60	58	48	46	45	34	33	32	32	32	25
2	84	76	70	65	75	69	63	59	55	51	47	41	39	36	29	27	26	26	26	20
3	76	67	59	53	68	60	54	49	48	43	39	36	33	30	26	23	22	22	22	17
4	70	59	51	45	62	53	46	41	42	37	33	32	29	26	23	20	18	18	18	14
5	64	52	44	38	57	47	40	35	37	32	28	29	25	22	20	18	16	16	16	12
6	59	47	38	33	52	42	35	30	34	28	24	26	22	19	18	16	14	14	14	11
7	54	42	34	28	48	38	31	26	30	25	21	23	19	17	17	14	12	12	12	9
8	50	38	30	25	45	34	28	23	28	22	19	21	17	15	15	13	11	11	11	8
9	46	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	10	10	7
10	43	31	24	20	39	29	22	18	23	18	15	18	14	12	13	10	9	9	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7812	7812	7812
5°	7847	7478	7437
10°	7795	7220	7114
15°	7684	6952	6784
20°	7545	6669	6470
25°	7408	6401	6186
30°	7216	6127	5904
35°	7023	5863	5698
40°	6819	5635	5491
45°	6622	5428	5312
50°	6414	5238	5135
55°	6193	5035	4955
60°	5926	4824	4767
65°	5645	4580	4548
70°	5327	4319	4315
75°	4923	4060	4092
80°	4279	3789	3864
85°	3630	3534	3666

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6622 cd/sqm

TEST NUMBER: P1029581

CATALOG NUMBER: S122DIW-B485D970UB2750-4F0-XX-W2A-D1_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.8	0.9
10°-20°	134.2	2.6
20°-30°	203.3	3.9
30°-40°	247.6	4.8
40°-50°	266.4	5.2
50°-60°	258.7	5.0
60°-70°	225.9	4.4
70°-80°	173.9	3.4
80°-90°	119.8	2.3
90°-100°	152.7	3.0
100°-110°	288.9	5.6
110°-120°	432.6	8.4
120°-130°	539.6	10.5
130°-140°	590.5	11.4
140°-150°	571.8	11.1
150°-160°	478.3	9.3
160°-170°	317.2	6.1
170°-180°	110.9	2.1
0°-30°	384.3	7.4
0°-40°	631.8	12.2
0°-60°	1156.9	22.4
0°-90°	1676.4	32.5
90°-120°	874.2	16.9
90°-150°	2576.1	49.9
90°-180°	3483.0	67.5
0°-180°	5159.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	494	494	494	494	494	
5°	495	493	488	493	492	47
15°	472	474	474	480	479	133
25°	429	434	441	449	451	197
35°	370	382	396	411	416	231
45°	303	323	348	370	377	234
55°	232	258	295	321	330	208
65°	159	194	236	265	275	158
75°	88	128	174	204	214	93
85°	26	70	116	146	156	27
90°	8	61	129	156	165	8
95°	57	100	145	173	179	62
105°	216	240	279	306	314	228
115°	398	412	442	462	467	394
125°	576	585	605	622	627	515
135°	744	755	765	779	781	576
145°	903	910	916	921	921	564
155°	1032	1035	1038	1043	1040	475
165°	1123	1122	1122	1129	1124	317
175°	1169	1166	1164	1171	1165	111
180°	1171	1171	1171	1171	1171	

TEST NUMBER: P1029581

CATALOG NUMBER: S122DIW-B485D970UB2750-4F0-XX-W2A-D1_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	493.5	493.5	493.5	493.5	493.5
2.5°	497.1	494.9	489.9	493.5	492.1
5°	494.9	492.8	488.5	492.8	492.1
7.5°	491.3	489.9	486.3	491.3	490.6
10°	487.1	485.6	483.5	489.2	488.5
12.5°	479.9	480.6	479.2	484.9	484.2
15°	472.0	473.5	473.5	479.9	479.2
17.5°	462.0	464.9	467.0	473.5	473.5
20°	452.0	455.6	458.4	466.3	466.3
22.5°	441.3	445.6	449.9	457.7	459.2
25°	429.1	434.1	440.6	449.2	451.3
27.5°	414.8	422.7	429.8	440.6	442.0
30°	400.5	409.8	419.1	430.6	432.7
32.5°	384.8	395.5	407.0	420.5	424.8
35°	369.8	381.9	395.5	411.2	416.3
37.5°	353.3	366.9	384.1	401.2	406.2
40°	336.9	352.6	371.9	390.5	396.9
42.5°	321.1	336.9	359.7	380.5	386.9
45°	303.2	322.6	347.6	369.8	376.9
47.5°	286.1	306.8	335.4	358.3	366.2
50°	268.2	290.4	322.6	346.9	354.7
52.5°	251.0	274.6	309.0	334.0	342.6
55°	232.4	258.2	295.4	321.1	330.4
57.5°	214.6	243.2	280.4	308.3	317.6
60°	195.3	226.0	266.8	294.0	304.0
62.5°	178.1	210.3	251.0	280.4	289.7
65°	158.8	193.8	236.0	265.3	274.6
67.5°	141.6	178.1	221.0	250.3	260.3
70°	123.0	160.2	204.5	235.3	243.9
72.5°	105.9	144.5	189.5	219.6	230.3
75°	88.0	128.0	173.8	204.5	213.8
77.5°	70.8	112.3	158.8	189.5	199.5
80°	53.6	97.3	143.8	173.8	183.8
82.5°	39.3	82.2	129.5	159.5	168.8
85°	25.7	70.1	115.9	145.9	155.9
87.5°	15.7	58.6	104.4	133.7	143.0
90°	8.2	61.4	129.0	155.6	165.2
92.5°	28.1	73.9	118.6	147.5	156.0
95°	57.1	100.5	145.4	172.6	179.2
97.5°	90.9	130.6	176.0	202.5	211.1
100°	130.5	164.9	207.8	234.3	241.2
102.5°	171.2	200.8	243.3	270.1	276.9
105°	216.0	239.6	278.8	305.8	313.7
107.5°	261.4	282.5	318.3	343.6	346.5
110°	304.2	324.4	359.4	382.3	387.2

TEST NUMBER: P1029581

CATALOG NUMBER: S122DIW-B485D970UB2750-4F0-XX-W2A-D1_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	351.6	368.9	400.8	420.8	426.7
115°	398.0	411.8	442.0	462.5	467.3
117.5°	443.7	457.4	482.4	501.0	505.1
120°	490.1	500.9	521.6	541.6	546.5
122.5°	532.6	543.2	564.7	581.0	585.6
125°	576.3	585.2	605.1	621.5	627.0
127.5°	619.8	629.9	645.3	659.2	662.7
130°	660.3	672.4	685.4	700.7	702.4
132.5°	705.7	714.9	726.6	738.1	740.9
135°	744.5	755.4	764.6	778.6	781.3
137.5°	788.0	796.9	802.5	815.1	816.1
140°	826.5	834.7	841.0	852.5	852.9
142.5°	866.0	874.2	877.2	886.8	886.4
145°	902.9	909.8	915.7	921.0	920.6
147.5°	936.4	945.3	949.3	952.0	950.2
150°	971.0	976.9	980.9	983.9	980.9
152.5°	1001.6	1007.6	1012.5	1016.5	1012.5
155°	1032.3	1035.2	1038.2	1043.1	1040.2
157.5°	1058.9	1060.9	1062.9	1069.8	1064.9
160°	1082.6	1084.6	1085.6	1091.5	1087.6
162.5°	1104.4	1104.4	1105.4	1112.3	1107.3
165°	1123.1	1122.2	1122.2	1129.1	1124.1
167.5°	1139.9	1137.0	1137.0	1143.9	1139.0
170°	1152.8	1149.8	1148.8	1155.7	1149.8
172.5°	1161.7	1158.7	1157.7	1164.6	1158.7
175°	1168.6	1165.6	1163.6	1170.6	1164.6
177.5°	1172.5	1169.6	1167.6	1173.5	1167.6
180°	1170.6	1170.6	1170.6	1170.6	1170.6

(END OF REPORT)