

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: P1029588

Luminaire Tested: S122DIW-B485D970UB2750-4F0-XX-W2A-F1_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029588
REPORT IS A COMBINATION OF REPORTS P986319 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-F1_3500K
Description: Define 2 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

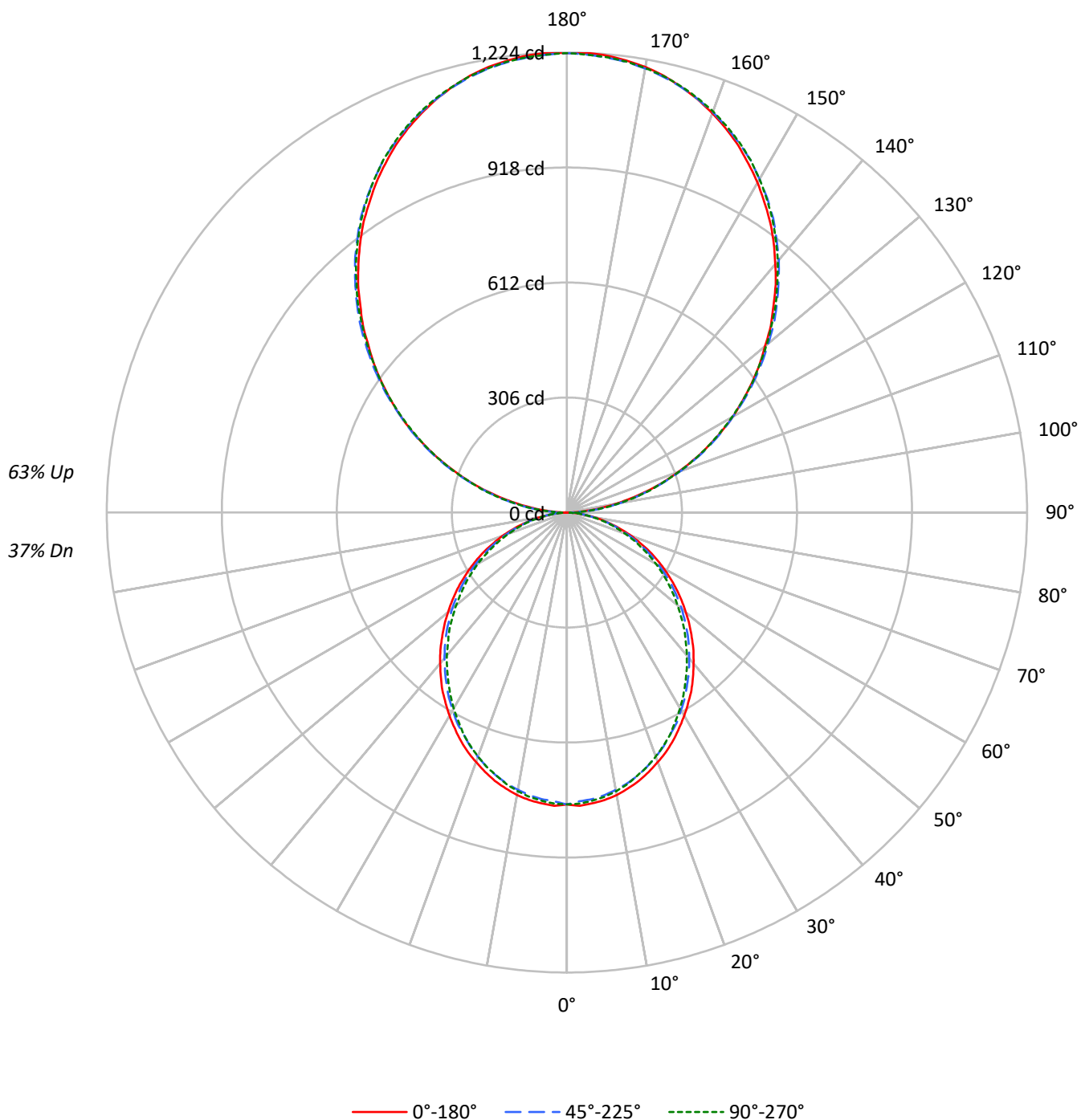
Lumens per Lamp: N/A
Luminaire Lumens: 5397.0 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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: P1029588

CATALOG NUMBER: S122DIW-B485D970UB2750-4F0-XX-W2A-F1_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P1029588

CATALOG NUMBER: S122DIW-B485D970UB2750-4F0-XX-W2A-F1_3500K

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
RCR																	
0	104	104	104	104	94	94	94	94	76	76	76		59	59	59		44
1	95	91	87	83	86	82	79	76	66	64	62		52	51	49		39
2	86	79	73	68	78	72	67	62	58	55	51		46	43	41		34
3	79	69	62	57	71	63	57	52	51	47	43		40	37	35		30
4	72	61	54	48	65	56	49	44	46	41	37		36	32	30		27
5	66	55	47	41	60	50	43	38	41	36	32		32	29	26		24
6	61	49	41	35	55	45	38	33	37	31	28		29	25	22		22
7	56	44	36	31	51	40	33	29	33	28	24		26	23	20		20
8	52	40	32	27	47	37	30	25	30	25	21		24	20	18		18
9	48	36	29	24	44	33	27	22	28	23	19		22	18	16		17
10	45	33	26	22	41	31	24	20	25	20	17		20	17	14		16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12295	12295	12295
5°	12315	11719	11636
10°	12213	11184	10963
15°	12035	10647	10255
20°	11794	10061	9585
25°	11552	9451	8916
30°	11249	8876	8212
35°	10964	8270	7524
40°	10611	7671	6870
45°	10258	7078	6231
50°	9876	6475	5568
55°	9473	5829	4939
60°	9018	5131	4286
65°	8521	4421	3599
70°	7891	3643	2907
75°	7021	2808	2243
80°	5964	1908	1444
85°	4322	887	614

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10258 cd/sqm

TEST NUMBER: P1029588

CATALOG NUMBER: S122DIW-B485D970UB2750-4F0-XX-W2A-F1_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	1.4
10°-20°	205.7	3.8
20°-30°	302.3	5.6
30°-40°	351.0	6.5
40°-50°	350.6	6.5
50°-60°	305.7	5.7
60°-70°	226.0	4.2
70°-80°	127.9	2.4
80°-90°	37.2	0.7
90°-100°	75.6	1.4
100°-110°	240.4	4.5
110°-120°	411.3	7.6
120°-130°	540.9	10.0
130°-140°	607.2	11.3
140°-150°	595.5	11.0
150°-160°	499.5	9.3
160°-170°	331.3	6.1
170°-180°	115.8	2.1
0°-30°	581.0	10.8
0°-40°	932.1	17.3
0°-60°	1588.4	29.4
0°-90°	1979.5	36.7
90°-120°	727.3	13.5
90°-150°	2471.0	45.8
90°-180°	3418.0	63.3
0°-180°	5397.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	777	777	777	777	777	
5°	777	774	766	772	770	74
15°	739	735	725	728	724	208
25°	669	663	650	652	650	308
35°	577	570	558	553	550	360
45°	470	464	453	445	442	363
55°	356	351	342	333	329	318
65°	240	235	228	221	217	237
75°	126	124	120	116	117	134
85°	31	30	29	27	26	34
90°	1	13	36	34	35	5
95°	54	64	66	66	64	60
105°	222	225	227	229	229	234
115°	413	419	417	416	413	408
125°	600	610	606	603	602	536
135°	777	788	790	789	786	600
145°	943	950	956	957	953	589
155°	1078	1081	1084	1089	1086	496
165°	1173	1172	1172	1179	1174	331
175°	1220	1217	1215	1222	1216	116
180°	1222	1222	1222	1222	1222	

TEST NUMBER: P1029588

CATALOG NUMBER: S122DIW-B485D970UB2750-4F0-XX-W2A-F1_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	776.7	776.7	776.7	776.7	776.7
2.5°	781.2	777.4	769.2	776.7	775.2
5°	776.7	773.7	765.5	771.5	770.0
7.5°	771.5	767.0	758.8	764.7	763.2
10°	763.2	758.0	749.0	755.0	752.8
12.5°	752.0	747.6	738.6	742.3	740.8
15°	739.3	734.9	725.2	728.1	724.4
17.5°	723.7	719.2	709.5	713.2	709.5
20°	706.5	702.0	691.5	693.8	690.8
22.5°	689.3	682.6	672.9	672.9	671.4
25°	669.1	663.2	650.5	652.0	650.5
27.5°	646.7	641.5	631.8	629.6	625.8
30°	624.3	618.4	607.2	604.9	601.9
32.5°	600.4	596.0	584.0	579.5	576.5
35°	577.3	569.8	557.9	553.4	549.7
37.5°	551.1	544.4	532.5	527.2	523.5
40°	524.3	518.3	506.3	499.6	496.6
42.5°	498.1	492.1	480.2	472.7	468.2
45°	469.7	464.5	453.3	445.1	442.1
47.5°	442.1	436.9	424.9	416.7	412.2
50°	413.0	409.3	398.8	388.3	384.6
52.5°	384.6	379.4	369.7	361.5	356.2
55°	355.5	351.0	342.0	333.1	329.3
57.5°	326.4	322.6	312.9	304.0	301.0
60°	297.2	294.2	283.8	275.6	273.3
62.5°	268.9	263.6	256.2	248.7	245.7
65°	239.7	235.2	227.8	221.1	217.3
67.5°	209.9	206.1	199.4	194.2	191.2
70°	182.2	179.2	172.5	167.3	164.3
72.5°	153.8	150.9	147.1	141.9	139.7
75°	125.5	124.0	120.2	115.8	117.2
77.5°	100.1	97.1	95.6	93.4	91.1
80°	74.7	73.9	72.4	70.2	68.7
82.5°	50.8	50.8	50.0	47.0	47.0
85°	30.6	29.9	29.1	26.9	26.1
87.5°	13.4	11.9	10.5	8.2	7.5
90°	1.0	13.4	36.1	34.0	35.1
92.5°	22.7	30.9	32.0	33.0	33.0
95°	53.6	64.0	66.0	66.0	64.0
97.5°	89.7	99.0	103.2	103.2	103.2
100°	131.0	139.3	142.4	142.4	141.3
102.5°	174.3	180.5	184.6	185.7	184.6
105°	221.8	224.9	226.9	229.0	229.0
107.5°	269.2	273.4	273.4	274.4	269.2
110°	314.6	320.8	320.8	320.8	317.7

TEST NUMBER: P1029588

CATALOG NUMBER: S122DIW-B485D970UB2750-4F0-XX-W2A-F1_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	364.1	370.3	369.3	366.2	364.1
115°	412.6	418.8	416.7	415.7	412.6
117.5°	461.1	469.3	464.2	461.1	458.0
120°	509.6	517.8	509.6	509.6	506.5
122.5°	553.9	564.3	559.1	556.0	553.9
125°	600.4	609.6	606.5	603.4	602.4
127.5°	645.7	657.1	653.0	648.8	645.7
130°	688.0	701.4	699.4	697.3	693.2
132.5°	735.5	745.8	746.8	741.7	738.6
135°	776.7	788.1	790.2	789.1	786.0
137.5°	822.1	831.4	833.5	832.5	828.3
140°	862.4	871.6	876.8	876.8	872.7
142.5°	903.6	912.9	916.0	917.0	912.9
145°	942.8	950.0	956.2	957.3	953.1
147.5°	977.9	987.2	991.3	993.4	989.2
150°	1014.0	1020.2	1024.3	1027.4	1024.3
152.5°	1046.0	1052.2	1057.3	1061.5	1057.3
155°	1078.0	1081.1	1084.1	1089.3	1086.2
157.5°	1105.8	1107.9	1109.9	1117.2	1112.0
160°	1130.6	1132.6	1133.7	1139.8	1135.7
162.5°	1153.3	1153.3	1154.3	1161.5	1156.4
165°	1172.9	1171.8	1171.8	1179.0	1173.9
167.5°	1190.4	1187.3	1187.3	1194.5	1189.4
170°	1203.8	1200.7	1199.7	1206.9	1200.7
172.5°	1213.1	1210.0	1209.0	1216.2	1210.0
175°	1220.3	1217.2	1215.2	1222.4	1216.2
177.5°	1224.4	1221.3	1219.3	1225.5	1219.3
180°	1222.4	1222.4	1222.4	1222.4	1222.4

(END OF REPORT)