

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: P1029441

Luminaire Tested: S122DIW-B290D970UB2750-4F0-XX-W2A-F1_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029441
REPORT IS A COMBINATION OF REPORTS P985869 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-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

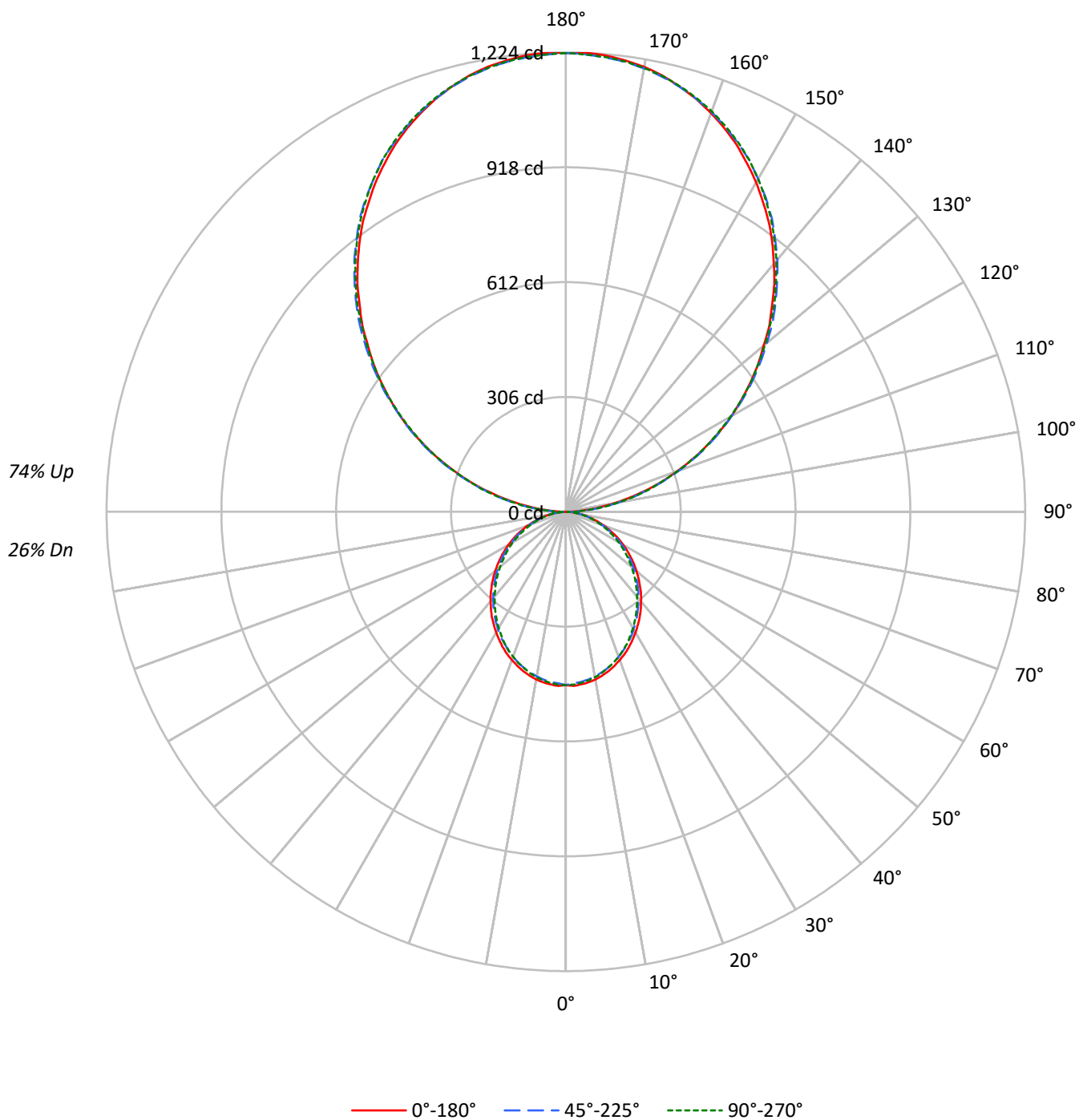
Lumens per Lamp: N/A
Luminaire Lumens: 4596.0 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
Input Voltage (V):
Input Current (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				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34	26			
1	92	88	84	81	82	79	76	73	61	59	57	45	43	42	30	29	28	22			
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24	18			
3	77	68	61	55	68	60	55	50	47	43	40	35	32	30	23	22	20	15			
4	70	60	52	46	62	53	47	42	42	37	34	31	28	25	21	19	17	13			
5	64	53	45	39	57	48	41	36	37	32	29	28	24	22	19	17	15	11			
6	59	47	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13	10			
7	54	43	35	30	48	38	32	27	30	25	22	23	19	17	15	13	12	9			
8	50	39	31	26	45	35	28	24	27	23	19	21	17	15	14	12	11	8			
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7			
10	44	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	9	7			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7310	7310	7310
5°	7322	6969	6918
10°	7262	6651	6518
15°	7156	6331	6099
20°	7013	5983	5700
25°	6870	5619	5302
30°	6688	5277	4883
35°	6520	4917	4473
40°	6309	4562	4085
45°	6100	4210	3706
50°	5873	3850	3311
55°	5633	3467	2937
60°	5362	3050	2548
65°	5066	2628	2140
70°	4694	2167	1728
75°	4173	1670	1334
80°	3545	1136	860
85°	2571	528	364

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6100 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.5	0.9
10°-20°	122.3	2.7
20°-30°	179.7	3.9
30°-40°	208.7	4.5
40°-50°	208.5	4.5
50°-60°	181.8	4.0
60°-70°	134.4	2.9
70°-80°	76.0	1.7
80°-90°	23.5	0.5
90°-100°	75.6	1.6
100°-110°	240.4	5.2
110°-120°	411.3	8.9
120°-130°	540.9	11.8
130°-140°	607.2	13.2
140°-150°	595.5	13.0
150°-160°	499.5	10.9
160°-170°	331.3	7.2
170°-180°	115.8	2.5
0°-30°	345.5	7.5
0°-40°	554.2	12.1
0°-60°	944.5	20.6
0°-90°	1178.5	25.6
90°-120°	727.3	15.8
90°-150°	2471.0	53.8
90°-180°	3418.0	74.4
0°-180°	4596.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	462	462	462	462	462	
5°	462	460	455	459	458	44
15°	440	437	431	433	431	124
25°	398	394	387	388	387	183
35°	343	339	332	329	327	214
45°	279	276	270	265	263	216
55°	211	209	203	198	196	189
65°	142	140	135	131	129	141
75°	75	74	72	69	70	80
85°	18	18	17	16	16	20
90°	1	13	36	34	35	4
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	461.8	461.8	461.8	461.8	461.8
2.5°	464.5	462.3	457.4	461.8	461.0
5°	461.8	460.1	455.2	458.7	457.8
7.5°	458.7	456.1	451.2	454.7	453.8
10°	453.8	450.7	445.4	449.0	447.6
12.5°	447.2	444.5	439.2	441.4	440.5
15°	439.6	437.0	431.2	433.0	430.8
17.5°	430.3	427.6	421.9	424.1	421.9
20°	420.1	417.4	411.2	412.5	410.8
22.5°	409.9	405.9	400.1	400.1	399.2
25°	397.9	394.3	386.8	387.7	386.8
27.5°	384.6	381.5	375.7	374.4	372.1
30°	371.2	367.7	361.0	359.7	357.9
32.5°	357.0	354.4	347.3	344.6	342.8
35°	343.3	338.8	331.7	329.1	326.8
37.5°	327.7	323.7	316.6	313.5	311.3
40°	311.7	308.2	301.1	297.1	295.3
42.5°	296.2	292.6	285.5	281.1	278.4
45°	279.3	276.2	269.6	264.7	262.9
47.5°	262.9	259.8	252.7	247.8	245.1
50°	245.6	243.4	237.1	230.9	228.7
52.5°	228.7	225.6	219.8	214.9	211.8
55°	211.4	208.7	203.4	198.1	195.8
57.5°	194.1	191.8	186.1	180.7	179.0
60°	176.7	175.0	168.7	163.9	162.5
62.5°	159.9	156.8	152.3	147.9	146.1
65°	142.5	139.9	135.4	131.4	129.2
67.5°	124.8	122.6	118.6	115.5	113.7
70°	108.4	106.6	102.6	99.5	97.7
72.5°	91.5	89.7	87.5	84.4	83.0
75°	74.6	73.7	71.5	68.8	69.7
77.5°	59.5	57.7	56.8	55.5	54.2
80°	44.4	44.0	43.1	41.7	40.9
82.5°	30.2	30.2	29.8	28.0	28.0
85°	18.2	17.8	17.3	16.0	15.5
87.5°	8.0	7.1	6.2	4.9	4.4
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

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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)