

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: P1029439

Luminaire Tested: S122DIW-B290D970UB2750-4F0-XX-W2A-F1_2700K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029439
REPORT IS A COMBINATION OF REPORTS P985867 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_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

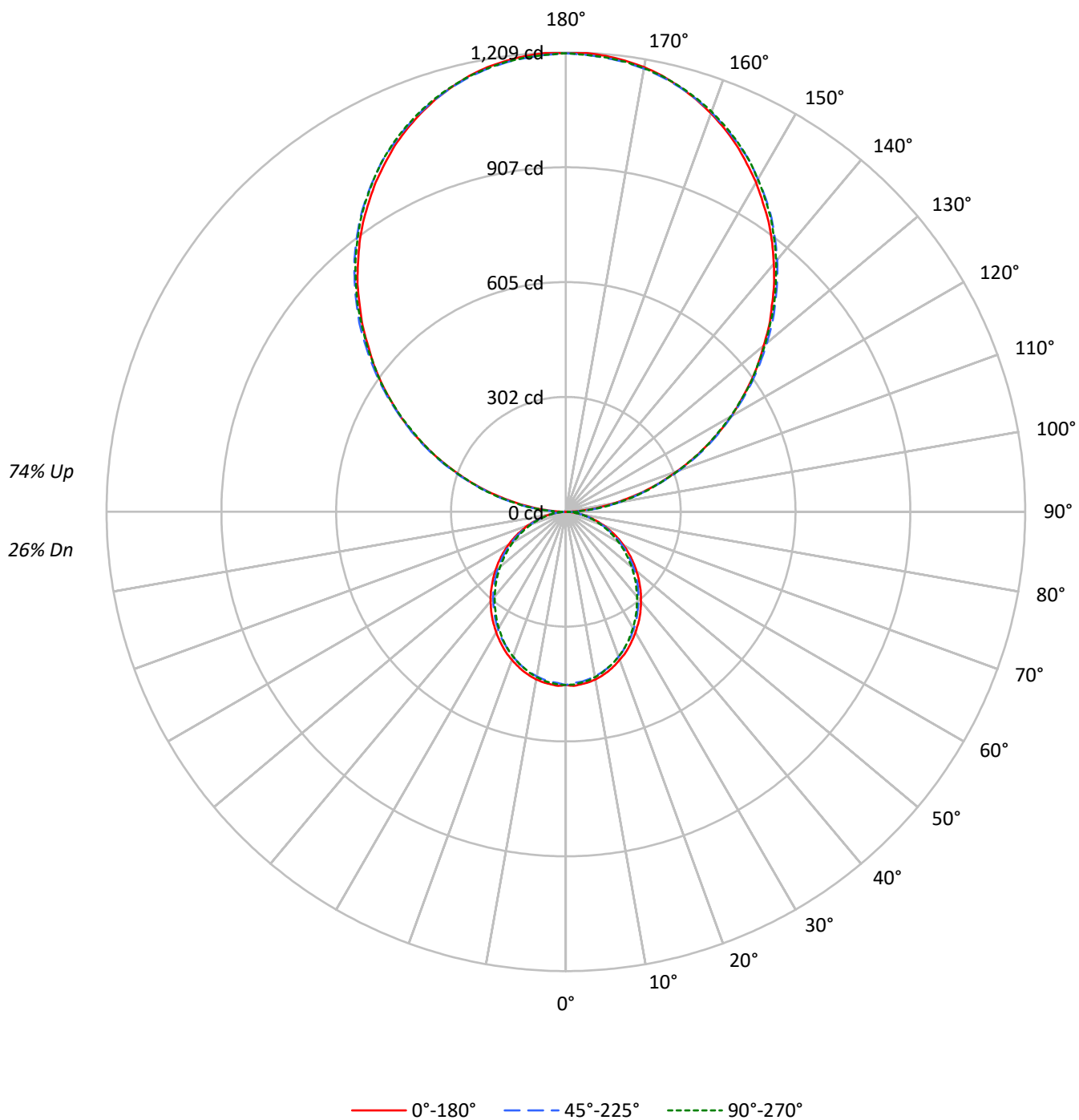
Lumens per Lamp: N/A
Luminaire Lumens: 4537.0 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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			
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
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°	7217	7217	7217
5°	7228	6880	6831
10°	7171	6566	6435
15°	7065	6250	6021
20°	6923	5907	5626
25°	6781	5548	5234
30°	6604	5210	4822
35°	6436	4855	4417
40°	6230	4503	4033
45°	6023	4155	3658
50°	5797	3801	3269
55°	5561	3422	2899
60°	5295	3012	2517
65°	5002	2595	2113
70°	4634	2139	1707
75°	4123	1649	1317
80°	3497	1120	847
85°	2543	521	360

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6023 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	0.9
10°-20°	120.7	2.7
20°-30°	177.4	3.9
30°-40°	206.1	4.5
40°-50°	205.8	4.5
50°-60°	179.5	4.0
60°-70°	132.7	2.9
70°-80°	75.1	1.7
80°-90°	23.2	0.5
90°-100°	74.6	1.6
100°-110°	237.3	5.2
110°-120°	406.0	8.9
120°-130°	534.0	11.8
130°-140°	599.4	13.2
140°-150°	587.8	13.0
150°-160°	493.1	10.9
160°-170°	327.0	7.2
170°-180°	114.3	2.5
0°-30°	341.1	7.5
0°-40°	547.2	12.1
0°-60°	932.5	20.6
0°-90°	1163.4	25.6
90°-120°	718.0	15.8
90°-150°	2439.2	53.8
90°-180°	3374.0	74.4
0°-180°	4537.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	456	456	456	456	456	
5°	456	454	449	453	452	43
15°	434	431	426	427	425	122
25°	393	389	382	383	382	181
35°	339	334	328	325	323	212
45°	276	273	266	261	260	213
55°	209	206	201	196	193	187
65°	141	138	134	130	128	139
75°	74	73	71	68	69	79
85°	18	18	17	16	15	20
90°	1	13	36	34	35	4
95°	53	63	65	65	63	59
105°	219	222	224	226	226	231
115°	407	413	411	410	407	403
125°	593	602	599	596	595	530
135°	767	778	780	779	776	593
145°	931	938	944	945	941	581
155°	1064	1067	1070	1075	1072	490
165°	1158	1157	1157	1164	1159	327
175°	1205	1202	1200	1207	1200	114
180°	1207	1207	1207	1207	1207	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	455.9	455.9	455.9	455.9	455.9
2.5°	458.6	456.4	451.6	455.9	455.1
5°	455.9	454.2	449.4	452.9	452.0
7.5°	452.9	450.2	445.4	448.9	448.1
10°	448.1	445.0	439.7	443.2	441.9
12.5°	441.5	438.8	433.6	435.8	434.9
15°	434.0	431.4	425.7	427.4	425.3
17.5°	424.8	422.2	416.5	418.7	416.5
20°	414.7	412.1	406.0	407.3	405.5
22.5°	404.7	400.7	395.0	395.0	394.1
25°	392.8	389.3	381.9	382.7	381.9
27.5°	379.7	376.6	370.9	369.6	367.4
30°	366.5	363.0	356.4	355.1	353.4
32.5°	352.5	349.9	342.8	340.2	338.5
35°	338.9	334.5	327.5	324.9	322.7
37.5°	323.5	319.6	312.6	309.5	307.3
40°	307.8	304.3	297.2	293.3	291.5
42.5°	292.4	288.9	281.9	277.5	274.9
45°	275.8	272.7	266.1	261.3	259.5
47.5°	259.5	256.5	249.5	244.6	242.0
50°	242.4	240.2	234.1	228.0	225.8
52.5°	225.8	222.7	217.0	212.2	209.1
55°	208.7	206.1	200.8	195.5	193.3
57.5°	191.6	189.4	183.7	178.4	176.7
60°	174.5	172.7	166.6	161.8	160.5
62.5°	157.8	154.8	150.4	146.0	144.2
65°	140.7	138.1	133.7	129.8	127.6
67.5°	123.2	121.0	117.1	114.0	112.2
70°	107.0	105.2	101.3	98.2	96.5
72.5°	90.3	88.6	86.4	83.3	82.0
75°	73.7	72.8	70.6	68.0	68.8
77.5°	58.7	57.0	56.1	54.8	53.5
80°	43.8	43.4	42.5	41.2	40.3
82.5°	29.8	29.8	29.4	27.6	27.6
85°	18.0	17.5	17.1	15.8	15.3
87.5°	7.9	7.0	6.1	4.8	4.4
90°	1.0	13.2	35.6	33.6	34.6
92.5°	22.4	30.5	31.6	32.6	32.6
95°	53.0	63.1	65.2	65.2	63.1
97.5°	88.6	97.8	101.8	101.8	101.8
100°	129.3	137.5	140.5	140.5	139.5
102.5°	172.1	178.2	182.3	183.3	182.3
105°	218.9	222.0	224.0	226.1	226.1
107.5°	265.8	269.8	269.8	270.9	265.8
110°	310.6	316.7	316.7	316.7	313.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	359.4	365.6	364.5	361.5	359.4
115°	407.3	413.4	411.4	410.4	407.3
117.5°	455.2	463.3	458.2	455.2	452.1
120°	503.0	511.2	503.0	503.0	500.0
122.5°	546.8	557.0	551.9	548.8	546.8
125°	592.6	601.8	598.7	595.7	594.7
127.5°	637.4	648.6	644.6	640.5	637.4
130°	679.2	692.4	690.4	688.4	684.3
132.5°	726.0	736.2	737.2	732.1	729.1
135°	766.8	778.0	780.0	779.0	775.9
137.5°	811.6	820.7	822.8	821.7	817.7
140°	851.3	860.4	865.5	865.5	861.5
142.5°	892.0	901.2	904.2	905.2	901.2
145°	930.7	937.8	943.9	945.0	940.9
147.5°	965.3	974.5	978.6	980.6	976.5
150°	1001.0	1007.1	1011.1	1014.2	1011.1
152.5°	1032.5	1038.6	1043.7	1047.8	1043.7
155°	1064.1	1067.1	1070.2	1075.3	1072.2
157.5°	1091.6	1093.6	1095.7	1102.8	1097.7
160°	1116.0	1118.1	1119.1	1125.2	1121.1
162.5°	1138.4	1138.4	1139.4	1146.6	1141.5
165°	1157.8	1156.8	1156.8	1163.9	1158.8
167.5°	1175.1	1172.0	1172.0	1179.2	1174.1
170°	1188.3	1185.3	1184.2	1191.4	1185.3
172.5°	1197.5	1194.4	1193.4	1200.5	1194.4
175°	1204.6	1201.6	1199.5	1206.7	1200.5
177.5°	1208.7	1205.6	1203.6	1209.7	1203.6
180°	1206.7	1206.7	1206.7	1206.7	1206.7

(END OF REPORT)