

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: P1029445

Luminaire Tested: S122DIW-B290D970UB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029445
REPORT IS A COMBINATION OF REPORTS P985878 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-F_3000K
Description: Define 2 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

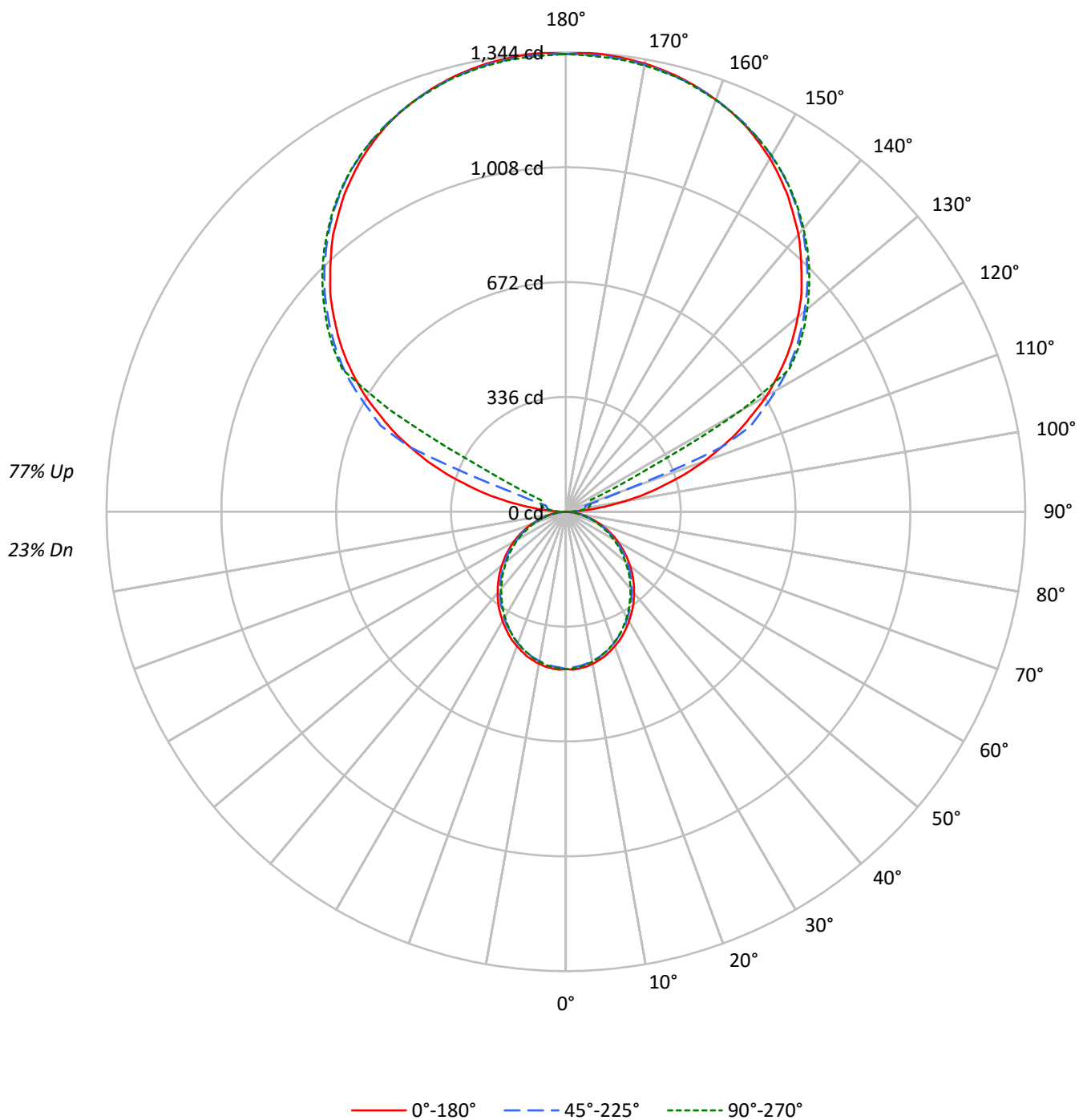
Lumens per Lamp: N/A
Luminaire Lumens: 5099.0 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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
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	89	89	89	89	68	68	68	49	49	49	31	31	31			23
1	92	88	84	80	81	78	75	72	60	58	56	43	42	41	28	27	26			19
2	83	76	71	66	74	68	63	59	52	49	46	38	36	34	24	23	22			16
3	76	67	60	55	67	60	54	49	46	42	39	33	31	29	22	20	19			14
4	70	59	52	46	61	53	46	42	41	36	33	30	27	24	19	18	16			12
5	64	53	45	39	56	47	40	35	36	32	28	26	23	21	17	15	14			10
6	58	47	39	34	52	42	35	31	33	28	24	24	21	18	16	14	12			9
7	54	42	35	29	48	38	31	27	29	25	21	22	18	16	14	12	11			8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10			7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9			6
10	43	32	25	20	38	28	22	18	22	18	15	17	14	11	11	9	8			6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7280	7280	7280
5°	7292	6938	6890
10°	7232	6622	6491
15°	7127	6304	6072
20°	6983	5958	5675
25°	6840	5595	5278
30°	6661	5255	4863
35°	6491	4896	4455
40°	6282	4542	4069
45°	6074	4191	3690
50°	5847	3833	3296
55°	5609	3451	2925
60°	5341	3037	2537
65°	5044	2618	2132
70°	4673	2156	1721
75°	4156	1663	1328
80°	3529	1131	856
85°	2557	524	364

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6074 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.3	0.8
10°-20°	121.8	2.4
20°-30°	179.0	3.5
30°-40°	207.9	4.1
40°-50°	207.6	4.1
50°-60°	181.0	3.5
60°-70°	133.8	2.6
70°-80°	75.7	1.5
80°-90°	22.3	0.4
90°-100°	44.2	0.9
100°-110°	164.6	3.2
110°-120°	436.7	8.6
120°-130°	724.2	14.2
130°-140°	769.3	15.1
140°-150°	715.0	14.0
150°-160°	574.8	11.3
160°-170°	370.4	7.3
170°-180°	127.5	2.5
0°-30°	344.0	6.7
0°-40°	551.9	10.8
0°-60°	940.5	18.4
0°-90°	1172.4	23.0
90°-120°	645.5	12.7
90°-150°	2853.9	56.0
90°-180°	3927.0	77.0
0°-180°	5099.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	460	460	460	460	460	
5°	460	458	453	457	456	44
15°	438	435	429	431	429	123
25°	396	393	385	386	385	182
35°	342	337	330	328	326	213
45°	278	275	268	264	262	215
55°	210	208	202	197	195	188
65°	142	139	135	131	129	140
75°	74	73	71	68	69	79
85°	18	18	17	16	16	20
90°	1	12	19	24	26	5
95°	63	31	38	43	42	75
105°	295	324	59	70	74	315
115°	557	574	598	149	80	549
125°	788	800	819	826	829	703
135°	975	990	999	1009	1007	753
145°	1131	1130	1146	1153	1148	707
155°	1245	1237	1248	1254	1246	574
165°	1312	1306	1309	1316	1309	371
175°	1342	1336	1338	1344	1335	128
180°	1339	1339	1339	1339	1339	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	459.9	459.9	459.9	459.9	459.9
2.5°	462.5	460.3	455.5	459.9	459.0
5°	459.9	458.1	453.2	456.8	455.9
7.5°	456.8	454.1	449.3	452.8	451.9
10°	451.9	448.8	443.5	447.1	445.7
12.5°	445.3	442.6	437.3	439.5	438.7
15°	437.8	435.1	429.4	431.1	428.9
17.5°	428.5	425.8	420.1	422.3	420.1
20°	418.3	415.7	409.5	410.8	409.0
22.5°	408.1	404.2	398.4	398.4	397.5
25°	396.2	392.7	385.1	386.0	385.1
27.5°	382.9	379.8	374.1	372.8	370.6
30°	369.7	366.1	359.5	358.2	356.4
32.5°	355.5	352.9	345.8	343.1	341.4
35°	341.8	337.4	330.3	327.7	325.5
37.5°	326.3	322.4	315.3	312.2	310.0
40°	310.4	306.9	299.8	295.8	294.1
42.5°	294.9	291.4	284.3	279.9	277.3
45°	278.1	275.0	268.4	263.5	261.8
47.5°	261.8	258.7	251.6	246.7	244.1
50°	244.5	242.3	236.1	229.9	227.7
52.5°	227.7	224.6	218.9	214.0	210.9
55°	210.5	207.8	202.5	197.2	195.0
57.5°	193.2	191.0	185.3	180.0	178.2
60°	176.0	174.2	168.0	163.2	161.8
62.5°	159.2	156.1	151.7	147.2	145.5
65°	141.9	139.3	134.9	130.9	128.7
67.5°	124.3	122.0	118.1	115.0	113.2
70°	107.9	106.1	102.1	99.1	97.3
72.5°	91.1	89.3	87.1	84.0	82.7
75°	74.3	73.4	71.2	68.5	69.4
77.5°	59.3	57.5	56.6	55.3	53.9
80°	44.2	43.8	42.9	41.6	40.7
82.5°	30.1	30.1	29.6	27.9	27.9
85°	18.1	17.7	17.2	15.9	15.5
87.5°	8.0	7.1	6.2	4.9	4.4
90°	1.0	11.6	19.4	24.2	26.2
92.5°	24.2	20.4	23.3	25.2	26.2
95°	63.0	31.0	37.8	42.6	41.7
97.5°	113.4	33.9	49.4	52.3	53.3
100°	171.5	38.8	55.2	63.0	64.9
102.5°	235.5	233.6	57.2	67.8	70.7
105°	294.6	323.7	59.1	69.8	73.7
107.5°	363.4	387.7	61.1	71.7	75.6
110°	429.3	449.7	169.6	72.7	76.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	491.4	508.8	492.3	74.6	77.5
115°	557.3	573.8	598.0	149.3	79.5
117.5°	614.5	633.8	650.3	511.7	257.8
120°	678.4	693.0	710.4	722.0	591.2
122.5°	732.7	748.2	767.6	773.4	774.4
125°	787.9	800.5	819.0	825.7	828.6
127.5°	838.3	851.9	866.4	876.1	877.1
130°	885.8	901.3	912.0	922.7	921.7
132.5°	934.3	946.9	957.5	966.3	965.3
135°	975.0	990.5	999.2	1008.9	1007.0
137.5°	1017.6	1029.3	1039.0	1048.6	1045.7
140°	1059.3	1067.1	1077.7	1086.4	1081.6
142.5°	1094.2	1101.0	1113.6	1121.3	1116.5
145°	1131.0	1130.1	1146.5	1153.3	1148.5
147.5°	1163.0	1160.1	1176.6	1181.4	1177.5
150°	1194.0	1187.2	1202.7	1208.6	1203.7
152.5°	1220.2	1212.4	1227.0	1232.8	1226.0
155°	1245.4	1236.7	1248.3	1254.1	1246.4
157.5°	1265.7	1258.0	1266.7	1273.5	1265.7
160°	1283.2	1277.4	1283.2	1289.0	1282.2
162.5°	1298.7	1292.9	1297.7	1304.5	1295.8
165°	1312.3	1306.4	1309.4	1316.1	1309.4
167.5°	1322.9	1317.1	1320.0	1326.8	1318.1
170°	1331.6	1325.8	1327.8	1334.6	1325.8
172.5°	1337.5	1331.6	1333.6	1340.4	1331.6
175°	1342.3	1335.5	1337.5	1344.2	1334.6
177.5°	1344.2	1337.5	1338.4	1345.2	1336.5
180°	1339.4	1339.4	1339.4	1339.4	1339.4

(END OF REPORT)