

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: P1029351

Luminaire Tested: S122DIW-B290D1440UB2750-4F0-XX-W2A-F1_2700K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029351
REPORT IS A COMBINATION OF REPORTS P985597 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B290D1440UB2750-4F0-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

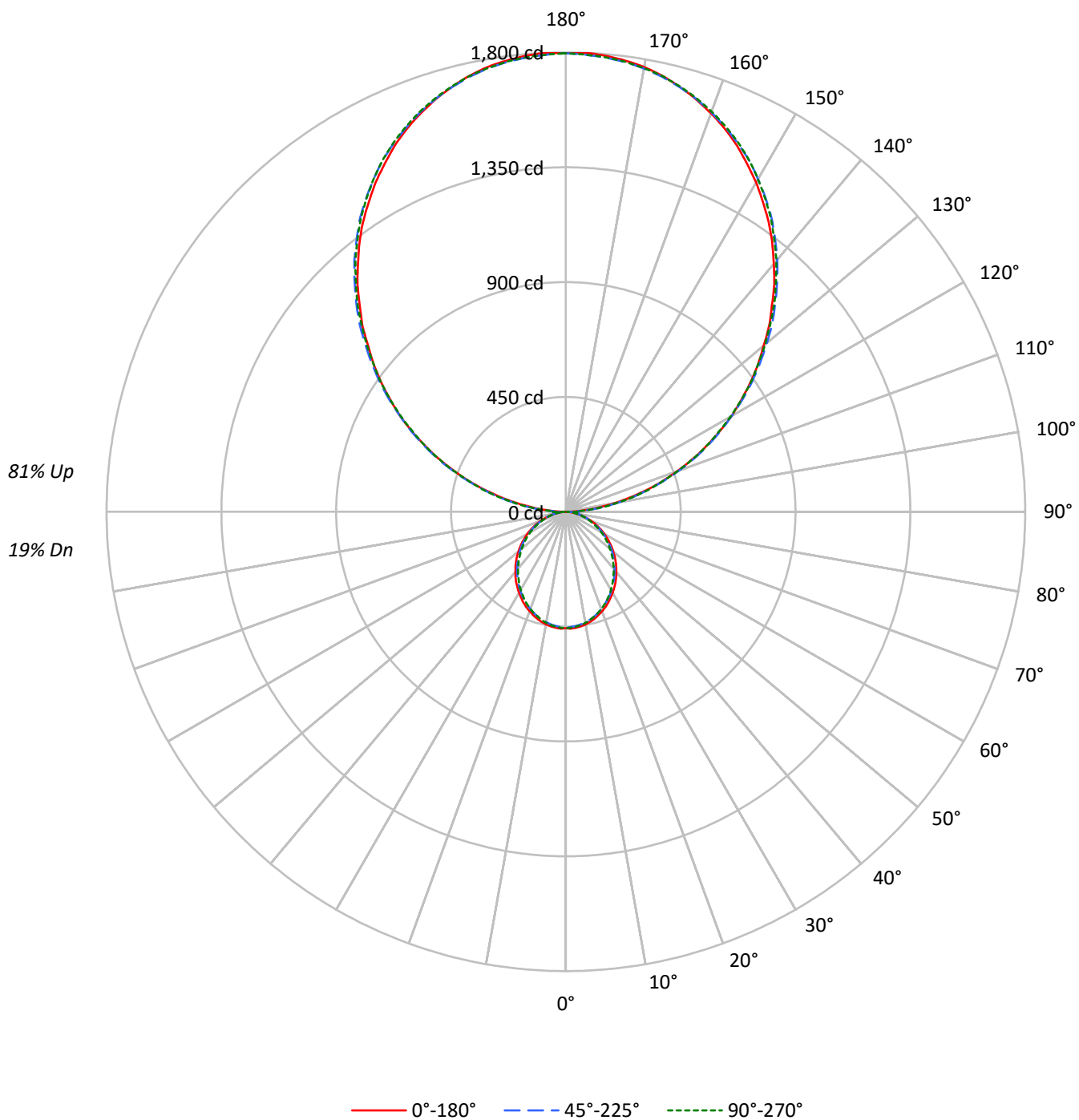
Lumens per Lamp: N/A
Luminaire Lumens: 6189.0 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 65.2
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	100	100	100	100	88	88	88	88	66	66	66	46	46	46	27	27	27	19		
1	91	87	83	80	80	77	73	71	58	56	54	40	39	38	24	24	23	16		
2	83	76	70	65	73	67	62	58	50	47	44	35	33	32	21	20	19	13		
3	75	66	59	54	66	59	53	48	44	41	37	31	29	27	19	18	17	11		
4	69	59	51	45	60	52	46	41	39	35	32	28	25	23	17	15	14	10		
5	63	52	44	39	55	46	40	35	35	31	27	25	22	20	15	14	12	8		
6	58	46	39	33	51	41	35	30	31	27	23	22	19	17	14	12	11	7		
7	53	42	34	29	47	37	31	26	28	24	20	20	17	15	12	11	10	7		
8	49	38	30	25	43	34	27	23	26	21	18	18	15	13	11	10	9	6		
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	10	9	8	5		
10	43	31	24	20	38	28	22	18	21	17	14	15	13	11	10	8	7	5		

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	0.7
10°-20°	120.7	2.0
20°-30°	177.4	2.9
30°-40°	206.1	3.3
40°-50°	205.8	3.3
50°-60°	179.5	2.9
60°-70°	132.7	2.1
70°-80°	75.1	1.2
80°-90°	24.9	0.4
90°-100°	111.1	1.8
100°-110°	353.4	5.7
110°-120°	604.7	9.8
120°-130°	795.2	12.8
130°-140°	892.6	14.4
140°-150°	875.4	14.1
150°-160°	734.3	11.9
160°-170°	487.0	7.9
170°-180°	170.2	2.8
0°-30°	341.1	5.5
0°-40°	547.2	8.8
0°-60°	932.5	15.1
0°-90°	1165.1	18.8
90°-120°	1069.2	17.3
90°-150°	3632.4	58.7
90°-180°	5024.0	81.2
0°-180°	6189.0	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°	2	20	53	50	52	6
95°	79	94	97	97	94	88
105°	326	331	334	337	337	344
115°	607	616	613	611	607	600
125°	882	896	892	887	886	789
135°	1142	1158	1162	1160	1156	882
145°	1386	1397	1406	1407	1401	866
155°	1585	1589	1594	1601	1597	729
165°	1724	1723	1723	1733	1726	486
175°	1794	1789	1786	1797	1788	170
180°	1797	1797	1797	1797	1797	

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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°	1.5	19.7	53.1	50.0	51.6
92.5°	33.4	45.5	47.0	48.5	48.5
95°	78.9	94.0	97.0	97.0	94.0
97.5°	131.9	145.6	151.6	151.6	151.6
100°	192.6	204.7	209.3	209.3	207.7
102.5°	256.3	265.4	271.4	273.0	271.4
105°	326.0	330.6	333.6	336.6	336.6
107.5°	395.8	401.8	401.8	403.4	395.8
110°	462.5	471.6	471.6	471.6	467.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	535.3	544.4	542.9	538.3	535.3
115°	606.6	615.7	612.6	611.1	606.6
117.5°	677.8	690.0	682.4	677.8	673.3
120°	749.1	761.2	749.1	749.1	744.6
122.5°	814.3	829.5	821.9	817.3	814.3
125°	882.5	896.2	891.6	887.1	885.6
127.5°	949.3	965.9	959.9	953.8	949.3
130°	1011.4	1031.2	1028.1	1025.1	1019.0
132.5°	1081.2	1096.4	1097.9	1090.3	1085.7
135°	1141.8	1158.5	1161.6	1160.0	1155.5
137.5°	1208.6	1222.2	1225.3	1223.7	1217.7
140°	1267.7	1281.4	1288.9	1288.9	1282.9
142.5°	1328.4	1342.0	1346.6	1348.1	1342.0
145°	1386.0	1396.6	1405.7	1407.2	1401.2
147.5°	1437.5	1451.2	1457.3	1460.3	1454.2
150°	1490.6	1499.7	1505.8	1510.3	1505.8
152.5°	1537.6	1546.7	1554.3	1560.4	1554.3
155°	1584.6	1589.2	1593.7	1601.3	1596.8
157.5°	1625.6	1628.6	1631.6	1642.3	1634.7
160°	1662.0	1665.0	1666.5	1675.6	1669.6
162.5°	1695.3	1695.3	1696.9	1707.5	1699.9
165°	1724.1	1722.6	1722.6	1733.2	1725.7
167.5°	1749.9	1745.4	1745.4	1756.0	1748.4
170°	1769.6	1765.1	1763.6	1774.2	1765.1
172.5°	1783.3	1778.7	1777.2	1787.8	1778.7
175°	1793.9	1789.4	1786.3	1796.9	1787.8
177.5°	1800.0	1795.4	1792.4	1801.5	1792.4
180°	1796.9	1796.9	1796.9	1796.9	1796.9

(END OF REPORT)