

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: P1029314

Luminaire Tested: S122DIW-B290D1240UB2750-4F0-XX-W2A-D1_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029314
REPORT IS A COMBINATION OF REPORTS P985495 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B290D1240UB2750-4F0-XX-W2A-D1_4000K
Description: Define 2 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

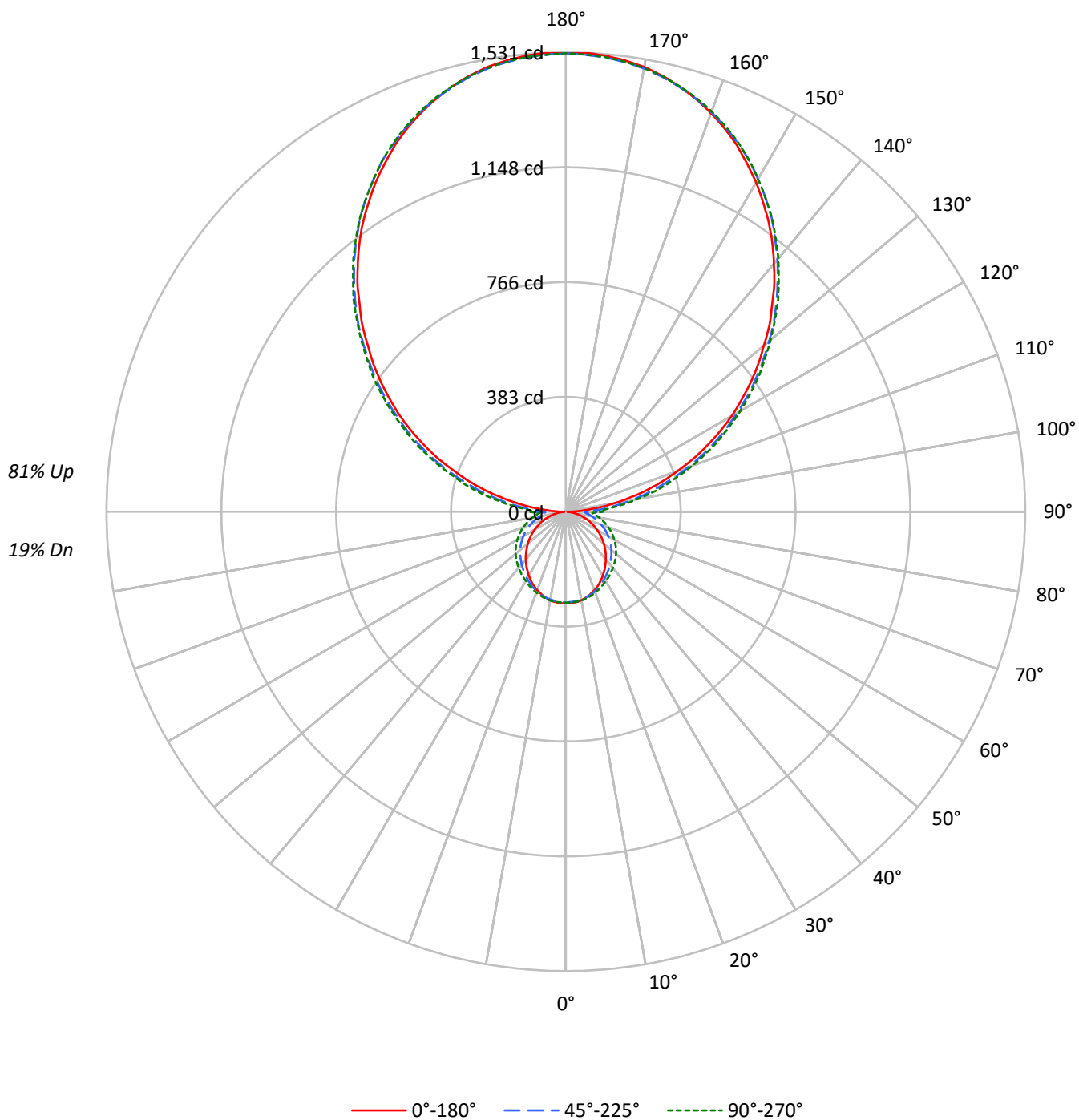
Lumens per Lamp: N/A
Luminaire Lumens: 5436.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
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	28	28	28	19		
1	90	86	82	78	79	76	73	70	57	55	53	39	38	37	23	23	22	15		
2	82	75	69	63	72	66	61	57	49	46	43	34	32	30	20	19	18	12		
3	74	65	58	52	65	58	52	47	43	39	36	30	28	25	18	16	15	10		
4	68	57	50	44	60	51	44	39	38	34	30	27	24	21	16	14	13	8		
5	62	51	43	37	54	45	38	33	34	29	26	24	21	18	14	12	11	7		
6	57	45	38	32	50	40	34	29	30	26	22	21	18	16	13	11	10	6		
7	53	41	33	28	46	36	30	25	27	23	19	19	16	14	12	10	8	5		
8	49	37	29	24	43	33	26	22	25	20	17	17	14	12	11	9	7	5		
9	45	33	26	21	40	30	23	19	23	18	15	16	13	11	10	8	7	4		
10	42	30	23	19	37	27	21	17	21	16	13	15	12	10	9	7	6	4		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4804	4804	4804
5°	4826	4599	4573
10°	4793	4439	4375
15°	4726	4275	4172
20°	4641	4101	3979
25°	4556	3936	3803
30°	4438	3767	3631
35°	4319	3605	3504
40°	4194	3465	3377
45°	4073	3338	3267
50°	3943	3221	3159
55°	3808	3097	3048
60°	3644	2967	2931
65°	3470	2816	2797
70°	3278	2657	2654
75°	3026	2497	2517
80°	2635	2330	2376
85°	2232	2174	2255

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4073 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.8	0.5
10°-20°	82.5	1.5
20°-30°	125.0	2.3
30°-40°	152.2	2.8
40°-50°	163.8	3.0
50°-60°	159.1	2.9
60°-70°	138.9	2.6
70°-80°	106.9	2.0
80°-90°	76.0	1.4
90°-100°	144.0	2.6
100°-110°	336.7	6.2
110°-120°	538.2	9.9
120°-130°	689.8	12.7
130°-140°	764.9	14.1
140°-150°	745.6	13.7
150°-160°	624.6	11.5
160°-170°	414.3	7.6
170°-180°	144.8	2.7
0°-30°	236.3	4.3
0°-40°	388.5	7.1
0°-60°	711.5	13.1
0°-90°	1033.3	19.0
90°-120°	1018.9	18.7
90°-150°	3219.1	59.2
90°-180°	4403.0	81.0
0°-180°	5436.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	304	304	304	304	304	
5°	304	303	300	303	303	29
15°	290	291	291	295	295	82
25°	264	267	271	276	278	121
35°	227	235	243	253	256	142
45°	186	198	214	227	232	144
55°	143	159	182	198	203	128
65°	98	119	145	163	169	97
75°	54	79	107	126	132	57
85°	16	43	71	90	96	17
90°	6	47	103	118	125	7
95°	71	104	133	150	153	78
105°	280	296	322	340	344	295
115°	518	530	548	559	560	512
125°	752	763	774	781	784	672
135°	972	986	993	1001	1000	751
145°	1179	1188	1196	1200	1197	737
155°	1348	1352	1356	1362	1358	621
165°	1467	1465	1465	1474	1468	414
175°	1526	1522	1520	1529	1521	145
180°	1529	1529	1529	1529	1529	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	303.5	303.5	303.5	303.5	303.5
2.5°	305.7	304.4	301.3	303.5	302.6
5°	304.4	303.0	300.4	303.0	302.6
7.5°	302.2	301.3	299.1	302.2	301.7
10°	299.5	298.6	297.3	300.8	300.4
12.5°	295.1	295.6	294.7	298.2	297.8
15°	290.3	291.2	291.2	295.1	294.7
17.5°	284.1	285.9	287.2	291.2	291.2
20°	278.0	280.2	281.9	286.8	286.8
22.5°	271.4	274.0	276.7	281.5	282.4
25°	263.9	267.0	270.9	276.2	277.5
27.5°	255.1	259.9	264.3	270.9	271.8
30°	246.3	252.0	257.7	264.8	266.1
32.5°	236.6	243.2	250.3	258.6	261.3
35°	227.4	234.9	243.2	252.9	256.0
37.5°	217.3	225.6	236.2	246.7	249.8
40°	207.2	216.8	228.7	240.2	244.1
42.5°	197.5	207.2	221.2	234.0	238.0
45°	186.5	198.4	213.8	227.4	231.8
47.5°	175.9	188.7	206.3	220.4	225.2
50°	164.9	178.6	198.4	213.3	218.2
52.5°	154.4	168.9	190.0	205.4	210.7
55°	142.9	158.8	181.7	197.5	203.2
57.5°	132.0	149.5	172.4	189.6	195.3
60°	120.1	139.0	164.1	180.8	186.9
62.5°	109.5	129.3	154.4	172.4	178.1
65°	97.6	119.2	145.1	163.2	168.9
67.5°	87.1	109.5	135.9	153.9	160.1
70°	75.7	98.5	125.8	144.7	150.0
72.5°	65.1	88.8	116.6	135.0	141.6
75°	54.1	78.7	106.9	125.8	131.5
77.5°	43.5	69.1	97.6	116.6	122.7
80°	33.0	59.8	88.4	106.9	113.0
82.5°	24.2	50.6	79.6	98.1	103.8
85°	15.8	43.1	71.3	89.7	95.9
87.5°	9.7	36.1	64.2	82.2	88.0
90°	5.7	46.7	103.2	118.3	124.8
92.5°	32.4	66.0	94.1	112.6	117.8
95°	70.6	104.2	133.2	149.9	152.6
97.5°	115.3	145.8	176.5	192.8	198.1
100°	166.9	193.5	222.0	238.3	241.8
102.5°	220.6	242.9	271.8	288.9	292.5
105°	279.5	296.2	321.6	339.6	344.5
107.5°	338.9	354.6	376.5	392.8	391.2
110°	395.2	411.8	433.3	447.4	448.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	457.2	471.9	490.8	501.0	503.3
115°	517.8	530.3	547.5	559.4	560.4
117.5°	577.9	591.7	603.8	613.1	613.6
120°	638.5	650.7	657.9	670.2	671.2
122.5°	694.0	707.4	717.2	725.2	726.6
125°	751.7	763.3	773.5	781.4	784.1
127.5°	808.4	822.1	828.8	834.7	834.8
130°	861.3	877.6	884.3	892.2	890.6
132.5°	920.6	933.0	940.9	944.7	944.3
135°	971.7	985.9	992.9	1000.9	1000.5
137.5°	1028.5	1040.1	1044.9	1052.0	1049.9
140°	1078.8	1090.0	1097.4	1104.4	1101.9
142.5°	1130.4	1141.6	1145.5	1152.1	1149.1
145°	1179.0	1188.0	1195.8	1199.7	1196.7
147.5°	1222.9	1234.5	1239.6	1242.6	1238.9
150°	1268.0	1275.8	1280.9	1284.8	1280.9
152.5°	1308.0	1315.7	1322.2	1327.4	1322.2
155°	1348.0	1351.9	1355.7	1362.2	1358.3
157.5°	1382.8	1385.4	1388.0	1397.0	1390.6
160°	1413.8	1416.4	1417.7	1425.4	1420.2
162.5°	1442.2	1442.2	1443.5	1452.5	1446.0
165°	1466.7	1465.4	1465.4	1474.4	1468.0
167.5°	1488.6	1484.7	1484.7	1493.8	1487.3
170°	1505.4	1501.5	1500.2	1509.2	1501.5
172.5°	1517.0	1513.1	1511.8	1520.9	1513.1
175°	1526.0	1522.1	1519.6	1528.6	1520.9
177.5°	1531.2	1527.3	1524.7	1532.5	1524.7
180°	1528.6	1528.6	1528.6	1528.6	1528.6

(END OF REPORT)