

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: P1033703

Luminaire Tested: S124DIW-B795D1050UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033703
REPORT IS A COMBINATION OF REPORTS P997999 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1050UB50-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

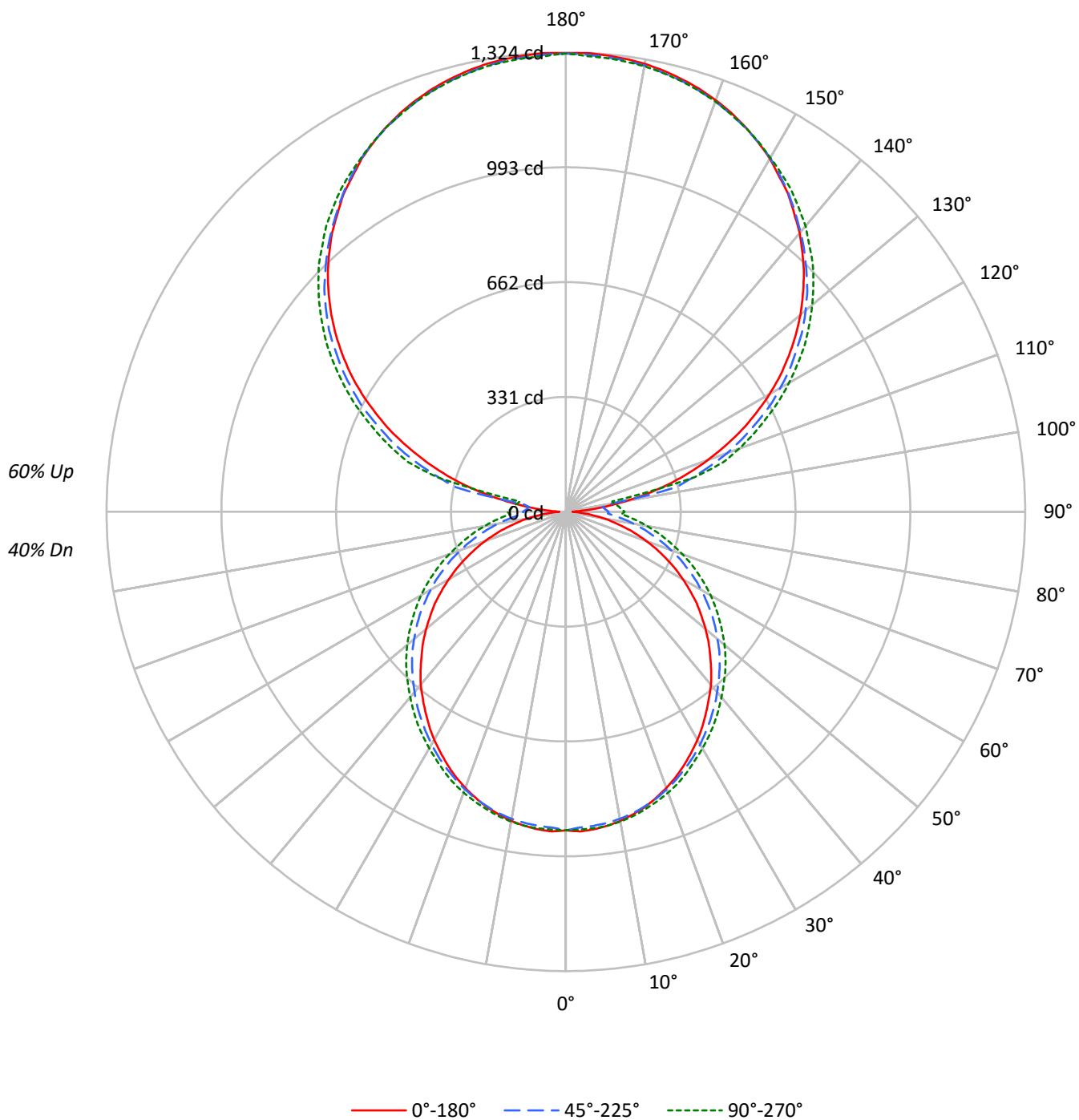
Lumens per Lamp: N/A
Luminaire Lumens: 7220.0 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 67.4
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
RCR																	
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47
1	95	90	86	82	86	82	79	75	67	64	62	53	51	50	40	39	38
2	86	78	72	66	78	71	66	61	58	54	51	46	43	41	35	33	31
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	31	28	26
4	71	60	52	46	64	55	48	43	45	40	36	36	32	29	27	25	22
5	65	54	45	39	59	49	42	36	40	35	31	32	28	25	24	22	19
6	60	48	40	34	54	44	37	31	36	31	26	29	25	22	22	19	17
7	55	43	35	29	50	39	32	27	33	27	23	26	22	19	20	17	15
8	51	39	31	26	47	36	29	24	30	24	20	24	20	17	18	15	13
9	48	35	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12
10	44	32	25	20	40	30	23	19	25	20	16	20	16	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7486	7486	7486
5°	7507	7291	7304
10°	7458	7147	7127
15°	7388	6986	6927
20°	7285	6812	6733
25°	7168	6619	6524
30°	7042	6428	6311
35°	6899	6234	6121
40°	6785	6046	5924
45°	6616	5870	5750
50°	6471	5671	5567
55°	6323	5478	5355
60°	6090	5239	5157
65°	5836	4980	4918
70°	5528	4686	4641
75°	5095	4357	4378
80°	4611	4024	4103
85°	3966	3687	3878

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6616 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.0	1.2
10°-20°	249.2	3.5
20°-30°	376.8	5.2
30°-40°	455.9	6.3
40°-50°	482.0	6.7
50°-60°	453.6	6.3
60°-70°	376.4	5.2
70°-80°	264.1	3.7
80°-90°	151.6	2.1
90°-100°	132.5	1.8
100°-110°	354.4	4.9
110°-120°	595.4	8.2
120°-130°	724.8	10.0
130°-140°	759.5	10.5
140°-150°	702.3	9.7
150°-160°	564.7	7.8
160°-170°	364.2	5.0
170°-180°	125.5	1.7
0°-30°	713.1	9.9
0°-40°	1169.0	16.2
0°-60°	2104.5	29.1
0°-90°	2896.7	40.1
90°-120°	1082.3	15.0
90°-150°	3269.0	45.3
90°-180°	4323.0	59.9
0°-180°	7220.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	918	918	918	918	918	
5°	919	916	909	917	916	87
15°	881	882	879	888	887	248
25°	806	812	815	827	828	371
35°	705	718	728	742	745	442
45°	588	608	627	645	650	454
55°	461	482	513	534	540	410
65°	319	352	386	412	420	316
75°	177	215	258	287	296	188
85°	54	98	144	175	185	57
90°	19	71	124	159	169	14
95°	68	68	111	145	155	78
105°	307	333	376	411	383	322
115°	561	574	606	630	637	553
125°	785	788	811	834	841	701
135°	970	969	980	999	1007	748
145°	1117	1119	1119	1126	1133	698
155°	1224	1225	1222	1226	1223	564
165°	1291	1286	1286	1294	1285	365
175°	1321	1315	1316	1325	1313	126
180°	1321	1321	1321	1321	1321	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	918.0	918.0	918.0	918.0	918.0
2.5°	922.2	919.1	910.9	918.0	917.0
5°	919.1	916.0	908.8	917.0	916.0
7.5°	912.9	910.9	904.7	913.9	912.9
10°	904.7	903.7	898.5	907.8	906.7
12.5°	893.4	893.4	890.3	898.5	898.5
15°	881.0	882.1	879.0	888.2	887.2
17.5°	864.6	867.7	866.6	875.9	874.9
20°	847.1	850.2	851.2	861.5	861.5
22.5°	827.6	831.7	833.7	844.0	846.1
25°	806.0	812.2	815.2	826.6	827.6
27.5°	782.3	791.6	795.7	806.0	807.0
30°	758.7	766.9	774.1	785.4	787.5
32.5°	733.0	743.3	751.5	764.9	766.9
35°	705.2	717.6	727.9	742.3	745.3
37.5°	677.5	691.9	704.2	718.6	721.7
40°	650.8	664.1	678.5	693.9	698.0
42.5°	619.9	635.3	652.8	670.3	673.4
45°	588.0	607.6	627.1	644.6	649.7
47.5°	558.2	577.8	600.4	617.9	624.0
50°	525.3	547.9	570.6	591.1	597.3
52.5°	492.4	515.1	541.8	562.3	568.5
55°	460.6	482.2	513.0	533.6	539.7
57.5°	424.6	451.3	481.1	505.8	510.9
60°	389.6	416.4	450.3	473.9	482.2
62.5°	355.7	385.5	419.4	443.1	451.3
65°	318.7	351.6	386.5	412.2	420.5
67.5°	283.7	318.7	355.7	381.4	389.6
70°	247.8	282.7	321.8	349.5	356.7
72.5°	212.8	248.8	290.9	317.7	325.9
75°	176.8	214.9	258.0	286.8	296.1
77.5°	142.9	183.0	228.2	257.0	267.3
80°	112.1	153.2	198.4	229.3	237.5
82.5°	81.2	124.4	169.6	201.5	210.7
85°	54.5	97.7	143.9	174.8	185.0
87.5°	33.9	76.1	121.3	151.1	160.4
90°	19.4	71.4	123.5	159.3	169.4
92.5°	30.2	64.2	116.3	151.1	159.3
95°	67.7	68.0	111.1	144.9	155.1
97.5°	116.0	167.6	106.0	137.7	148.0
100°	173.3	217.8	121.6	132.6	140.8
102.5°	238.5	273.0	323.9	128.4	136.6
105°	306.7	333.1	376.1	410.7	383.4
107.5°	370.9	391.3	434.2	464.8	476.0
110°	435.0	452.4	494.3	519.9	531.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	497.2	515.4	551.4	573.0	585.2
115°	561.4	573.6	605.5	630.1	637.3
117.5°	619.7	629.8	663.6	684.2	692.4
120°	677.9	684.9	713.8	736.3	742.6
122.5°	733.2	735.2	765.0	786.6	791.8
125°	784.6	787.5	811.3	833.7	840.9
127.5°	835.0	834.9	860.4	877.9	884.1
130°	882.4	882.4	901.7	921.2	927.4
132.5°	926.8	927.8	944.1	962.5	967.7
135°	970.3	969.3	980.4	998.8	1007.0
137.5°	1009.8	1008.7	1017.7	1035.2	1039.3
140°	1048.3	1049.2	1052.3	1068.5	1074.7
142.5°	1081.8	1085.8	1085.8	1099.0	1103.1
145°	1117.4	1119.3	1119.3	1126.5	1132.6
147.5°	1145.0	1150.0	1149.0	1151.0	1156.1
150°	1175.7	1178.6	1177.6	1177.6	1178.6
152.5°	1200.4	1203.3	1201.3	1203.3	1202.3
155°	1224.1	1225.1	1222.1	1226.0	1223.1
157.5°	1244.8	1244.8	1240.9	1245.8	1240.9
160°	1262.6	1259.6	1258.6	1264.6	1258.6
162.5°	1278.4	1274.4	1273.5	1279.4	1272.5
165°	1291.2	1286.3	1286.3	1294.2	1285.3
167.5°	1302.1	1297.2	1296.2	1305.1	1295.2
170°	1311.0	1305.1	1306.1	1314.0	1304.1
172.5°	1316.9	1311.0	1312.0	1319.9	1309.0
175°	1320.9	1315.0	1315.9	1324.8	1313.0
177.5°	1323.8	1316.9	1318.9	1326.8	1315.0
180°	1320.9	1320.9	1320.9	1320.9	1320.9

(END OF REPORT)