

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: P1033697

Luminaire Tested: S124DIW-B795D1050UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033697
REPORT IS A COMBINATION OF REPORTS P997990 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1050UB40-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

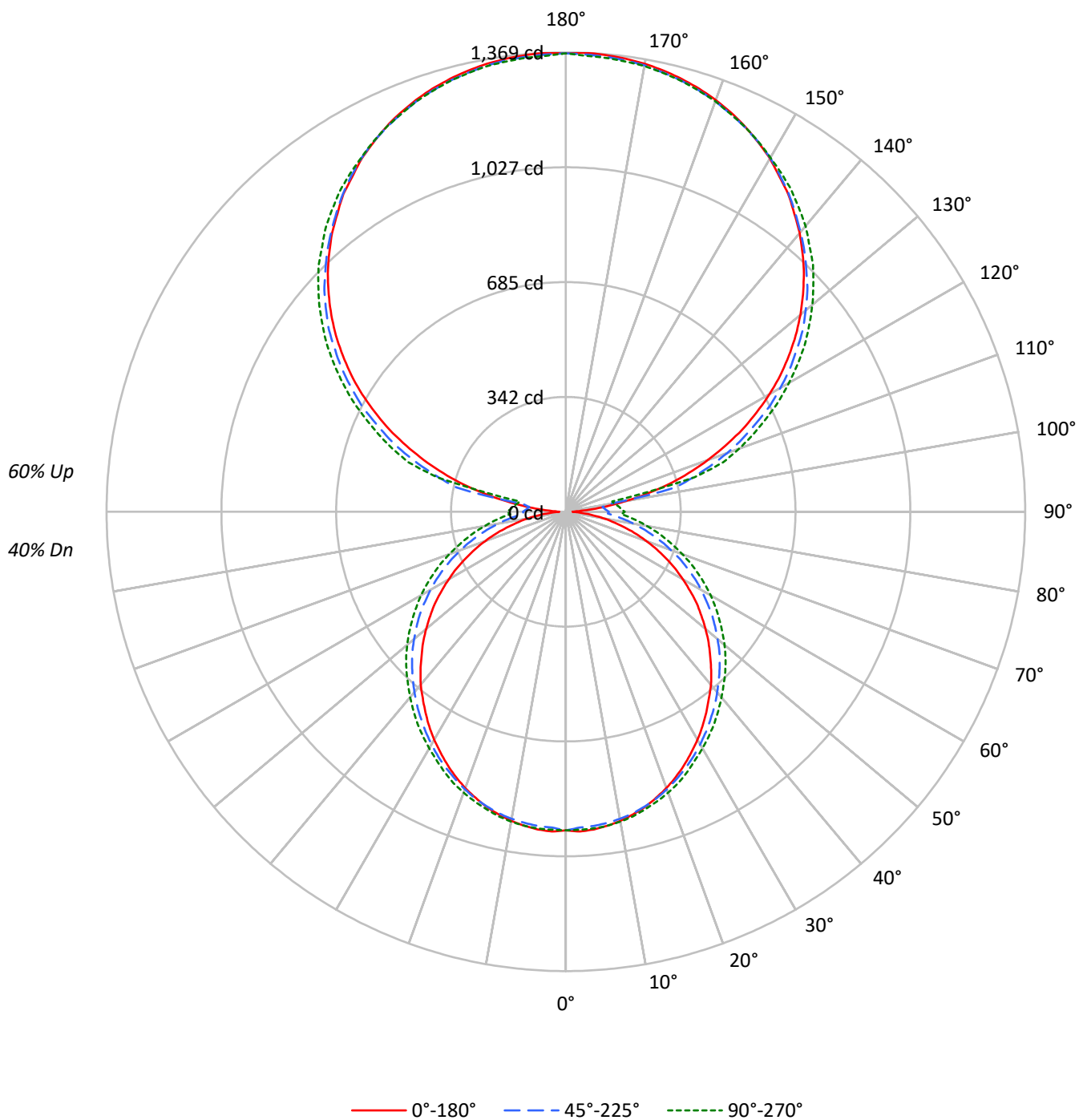
Lumens per Lamp: N/A
Luminaire Lumens: 7467.0 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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					0
RW	70	50	30	10	70	50	30	10	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	40		
1	95	90	86	82	86	82	79	75	67	64	62	53	51	50	40	39	38	32		
2	86	78	72	66	78	71	66	61	58	54	51	46	43	41	35	33	31	26		
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	31	28	26	22		
4	71	60	52	46	64	55	48	43	45	40	36	36	32	29	27	25	22	18		
5	65	54	45	39	59	49	42	36	40	35	31	32	28	25	24	22	19	16		
6	60	48	40	34	54	44	37	31	36	31	26	29	25	22	22	19	17	14		
7	55	43	35	29	50	39	32	27	33	27	23	26	22	19	20	17	15	12		
8	51	39	31	26	47	36	29	24	30	24	20	24	20	17	18	15	13	11		
9	48	35	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12	10		
10	44	32	25	20	40	30	23	19	25	20	16	20	16	14	16	13	11	9		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7742	7742	7742
5°	7763	7541	7554
10°	7713	7392	7371
15°	7641	7225	7164
20°	7534	7044	6964
25°	7413	6845	6747
30°	7283	6648	6527
35°	7136	6446	6330
40°	7017	6253	6127
45°	6842	6071	5947
50°	6693	5865	5757
55°	6538	5665	5539
60°	6300	5418	5333
65°	6036	5152	5085
70°	5716	4846	4799
75°	5271	4507	4527
80°	4767	4162	4242
85°	4097	3813	4012

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6842 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.0	1.2
10°-20°	257.7	3.5
20°-30°	389.7	5.2
30°-40°	471.5	6.3
40°-50°	498.4	6.7
50°-60°	469.1	6.3
60°-70°	389.3	5.2
70°-80°	273.2	3.7
80°-90°	156.8	2.1
90°-100°	137.0	1.8
100°-110°	366.5	4.9
110°-120°	615.8	8.2
120°-130°	749.6	10.0
130°-140°	785.5	10.5
140°-150°	726.4	9.7
150°-160°	584.0	7.8
160°-170°	376.6	5.0
170°-180°	129.8	1.7
0°-30°	737.4	9.9
0°-40°	1208.9	16.2
0°-60°	2176.5	29.1
0°-90°	2995.7	40.1
90°-120°	1119.4	15.0
90°-150°	3380.9	45.3
90°-180°	4471.0	59.9
0°-180°	7467.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	949	949	949	949	949	
5°	950	947	940	948	947	90
15°	911	912	909	919	918	257
25°	834	840	843	855	856	384
35°	729	742	753	768	771	457
45°	608	628	648	667	672	470
55°	476	499	530	552	558	424
65°	330	364	400	426	435	327
75°	183	222	267	297	306	194
85°	56	101	149	181	191	59
90°	20	74	128	165	175	15
95°	70	70	115	150	160	80
105°	317	344	389	425	396	333
115°	581	593	626	652	659	572
125°	812	814	839	862	870	725
135°	1003	1002	1014	1033	1042	774
145°	1156	1158	1158	1165	1171	722
155°	1266	1267	1264	1268	1265	584
165°	1335	1330	1330	1338	1329	377
175°	1366	1360	1361	1370	1358	130
180°	1366	1366	1366	1366	1366	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	949.4	949.4	949.4	949.4	949.4
2.5°	953.7	950.5	942.0	949.4	948.4
5°	950.5	947.3	939.9	948.4	947.3
7.5°	944.1	942.0	935.6	945.2	944.1
10°	935.6	934.5	929.2	938.8	937.7
12.5°	923.9	923.9	920.7	929.2	929.2
15°	911.2	912.2	909.0	918.6	917.5
17.5°	894.1	897.3	896.3	905.8	904.8
20°	876.1	879.3	880.3	891.0	891.0
22.5°	855.9	860.1	862.2	872.9	875.0
25°	833.5	839.9	843.1	854.8	855.9
27.5°	809.1	818.7	822.9	833.5	834.6
30°	784.6	793.1	800.6	812.3	814.4
32.5°	758.1	768.7	777.2	791.0	793.1
35°	729.4	742.1	752.7	767.6	770.8
37.5°	700.6	715.5	728.3	743.2	746.4
40°	673.0	686.8	701.7	717.7	721.9
42.5°	641.1	657.1	675.1	693.2	696.4
45°	608.1	628.3	648.5	666.6	671.9
47.5°	577.3	597.5	620.9	639.0	645.4
50°	543.3	566.7	590.1	611.3	617.7
52.5°	509.3	532.7	560.3	581.6	587.9
55°	476.3	498.6	530.5	551.8	558.2
57.5°	439.1	466.7	497.6	523.1	528.4
60°	403.0	430.6	465.7	490.1	498.6
62.5°	367.9	398.7	433.8	458.2	466.7
65°	329.6	363.6	399.8	426.3	434.8
67.5°	293.4	329.6	367.9	394.4	403.0
70°	256.2	292.4	332.8	361.5	368.9
72.5°	220.1	257.3	300.9	328.5	337.0
75°	182.9	222.2	266.9	296.6	306.2
77.5°	147.8	189.2	236.0	265.8	276.4
80°	115.9	158.4	205.2	237.1	245.6
82.5°	84.0	128.6	175.4	208.4	218.0
85°	56.3	101.0	148.8	180.7	191.4
87.5°	35.1	78.7	125.5	156.3	165.9
90°	20.1	73.8	127.8	164.7	175.3
92.5°	31.2	66.5	120.4	156.2	164.8
95°	70.0	70.4	115.0	149.8	160.4
97.5°	120.1	173.4	109.7	142.4	153.0
100°	179.3	225.3	125.8	137.1	145.6
102.5°	246.7	282.4	335.0	132.7	141.2
105°	317.2	344.5	389.0	424.8	396.5
107.5°	383.6	404.6	449.1	480.7	492.3
110°	449.9	467.9	511.2	537.7	549.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	514.2	533.1	570.3	592.6	605.2
115°	580.6	593.2	626.3	651.7	659.1
117.5°	640.9	651.4	686.4	707.6	716.1
120°	701.1	708.4	738.2	761.5	768.0
122.5°	758.3	760.4	791.1	813.4	818.8
125°	811.5	814.5	839.0	862.3	869.6
127.5°	863.6	863.5	889.9	908.0	914.4
130°	912.6	912.5	932.6	952.8	959.2
132.5°	958.5	959.5	976.4	995.5	1000.8
135°	1003.4	1002.4	1014.0	1033.0	1041.5
137.5°	1044.3	1043.3	1052.6	1070.6	1074.9
140°	1084.1	1085.2	1088.2	1105.1	1111.5
142.5°	1118.9	1123.0	1122.9	1136.7	1140.9
145°	1155.7	1157.7	1157.7	1165.1	1171.3
147.5°	1184.3	1189.3	1188.3	1190.4	1195.7
150°	1216.0	1219.0	1217.9	1217.9	1219.0
152.5°	1241.4	1244.5	1242.5	1244.5	1243.5
155°	1266.0	1267.0	1263.9	1268.0	1264.9
157.5°	1287.4	1287.4	1283.3	1288.4	1283.3
160°	1305.8	1302.7	1301.7	1307.9	1301.7
162.5°	1322.2	1318.1	1317.1	1323.2	1316.0
165°	1335.4	1330.3	1330.3	1338.5	1329.3
167.5°	1346.7	1341.6	1340.6	1349.7	1339.5
170°	1355.9	1349.7	1350.8	1358.9	1348.7
172.5°	1362.0	1355.9	1356.9	1365.1	1353.8
175°	1366.1	1360.0	1361.0	1370.2	1357.9
177.5°	1369.2	1362.0	1364.1	1372.2	1360.0
180°	1366.1	1366.1	1366.1	1366.1	1366.1

(END OF REPORT)