

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: P1033728

Luminaire Tested: S124DIW-B795D1340UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033728
REPORT IS A COMBINATION OF REPORTS P998057 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1340UB40-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

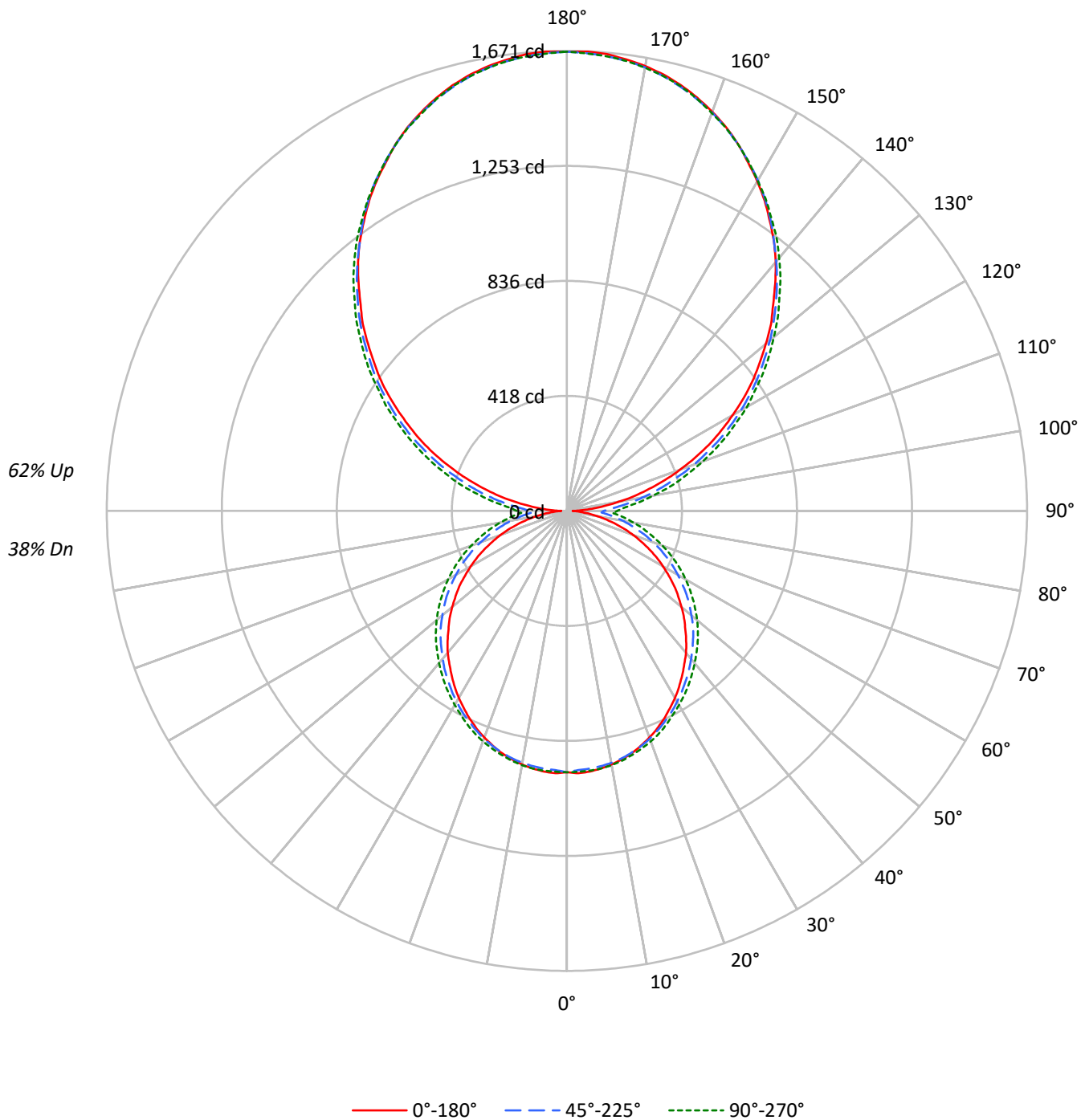
Lumens per Lamp: N/A
Luminaire Lumens: 7869.0 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 78
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38		
1	94	90	86	82	85	81	78	75	66	64	61	52	50	49	39	38	37	30		
2	86	78	72	66	77	71	65	61	57	53	50	45	42	40	34	32	30	25		
3	78	68	61	55	70	62	55	50	50	46	42	39	36	33	29	27	25	21		
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	24	22	18		
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	23	21	19	15		
6	60	48	40	34	54	43	36	31	36	30	26	28	24	21	21	18	16	13		
7	55	43	35	29	50	39	32	27	32	27	23	25	22	19	19	16	14	12		
8	51	39	31	26	46	35	29	24	29	24	20	23	19	16	18	15	13	10		
9	47	35	28	23	43	32	26	21	27	21	18	21	17	15	16	14	11	9		
10	44	32	25	20	40	30	23	19	24	19	16	20	16	13	15	12	10	8		

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	1.1
10°-20°	257.7	3.3
20°-30°	389.7	5.0
30°-40°	471.5	6.0
40°-50°	498.4	6.3
50°-60°	469.1	6.0
60°-70°	389.3	4.9
70°-80°	273.2	3.5
80°-90°	157.6	2.0
90°-100°	200.4	2.5
100°-110°	393.6	5.0
110°-120°	598.8	7.6
120°-130°	755.3	9.6
130°-140°	830.6	10.6
140°-150°	807.7	10.3
150°-160°	677.5	8.6
160°-170°	450.8	5.7
170°-180°	157.8	2.0
0°-30°	737.4	9.4
0°-40°	1208.9	15.4
0°-60°	2176.5	27.7
0°-90°	2996.4	38.1
90°-120°	1192.8	15.2
90°-150°	3586.5	45.6
90°-180°	4873.0	61.9
0°-180°	7869.0	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°	21	78	134	172	183	17
95°	91	138	190	223	233	95
105°	310	333	377	408	420	330
115°	569	578	610	632	638	562
125°	824	822	848	865	869	734
135°	1059	1066	1074	1088	1091	819
145°	1285	1289	1290	1295	1296	804
155°	1471	1471	1469	1475	1469	677
165°	1601	1597	1595	1602	1597	451
175°	1666	1659	1658	1667	1658	158
180°	1668	1668	1668	1668	1668	

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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°	20.9	77.6	133.7	172.2	183.3
92.5°	49.4	103.5	155.7	189.2	199.1
95°	91.2	137.9	190.5	223.1	232.7
97.5°	136.7	177.8	231.7	264.5	274.1
100°	192.3	225.1	278.2	309.5	317.0
102.5°	251.7	276.4	327.1	358.5	368.3
105°	310.2	332.7	377.2	407.7	420.1
107.5°	373.4	392.7	431.3	463.0	469.2
110°	436.8	454.3	490.2	512.1	524.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	502.8	515.6	548.1	571.5	580.0
115°	568.9	578.4	609.9	632.0	638.1
117.5°	632.1	638.5	669.1	687.5	692.2
120°	694.2	702.6	729.5	744.4	755.4
122.5°	760.0	761.3	788.7	806.1	807.1
125°	823.5	822.4	847.7	865.4	869.1
127.5°	881.6	884.4	903.1	919.6	925.7
130°	942.4	945.2	962.2	978.8	980.0
132.5°	1005.6	1007.1	1018.6	1034.1	1039.1
135°	1058.7	1066.4	1073.9	1088.4	1090.9
137.5°	1119.3	1122.2	1129.0	1141.1	1147.7
140°	1180.0	1181.6	1182.6	1195.1	1199.2
142.5°	1234.5	1237.0	1234.6	1246.3	1250.5
145°	1284.8	1288.8	1290.1	1295.2	1295.6
147.5°	1336.4	1341.7	1340.4	1340.2	1343.2
150°	1382.8	1386.9	1386.9	1386.9	1385.6
152.5°	1425.6	1428.2	1429.5	1433.3	1429.5
155°	1470.7	1470.7	1469.4	1474.6	1469.4
157.5°	1509.4	1506.9	1506.9	1510.7	1506.9
160°	1543.0	1541.7	1540.4	1544.3	1537.8
162.5°	1573.9	1570.1	1568.8	1576.5	1570.1
165°	1601.0	1597.2	1594.6	1602.3	1597.2
167.5°	1623.0	1617.8	1617.8	1625.6	1617.8
170°	1641.0	1634.6	1635.9	1643.6	1634.6
172.5°	1653.9	1648.8	1648.8	1657.8	1648.8
175°	1665.5	1659.1	1657.8	1666.8	1657.8
177.5°	1670.7	1664.3	1664.3	1673.3	1663.0
180°	1668.1	1668.1	1668.1	1668.1	1668.1

(END OF REPORT)