

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: P1034251

Luminaire Tested: S124RDIW-B795D1340UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034251
REPORT IS A COMBINATION OF REPORTS P1000779 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B795D1340UB40-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

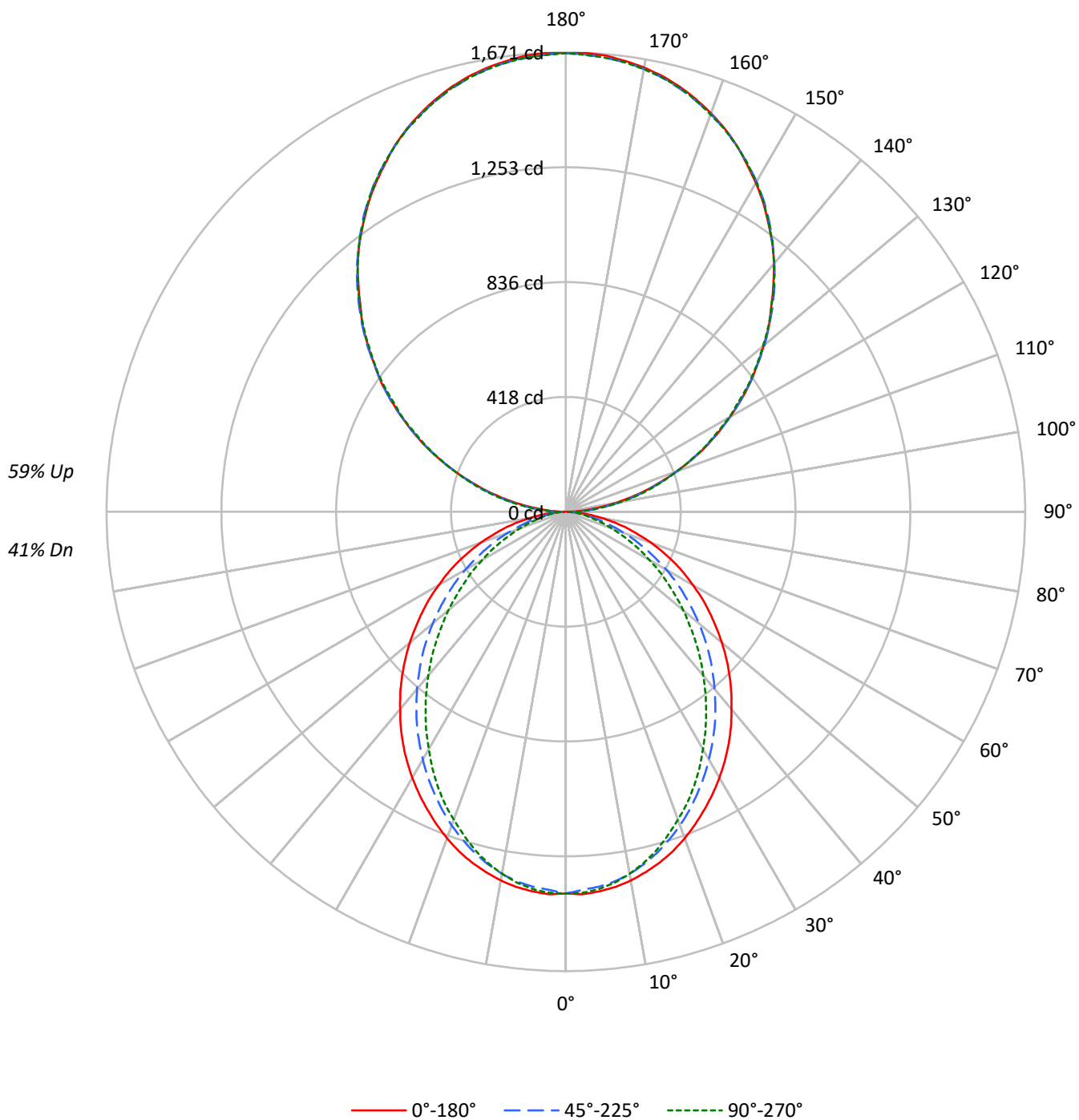
Lumens per Lamp: N/A
Luminaire Lumens: 7840.0 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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
RCR																	
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	43	42	41
2	88	80	74	69	80	74	68	64	61	57	54	49	46	44	38	36	35
3	80	71	64	58	73	65	59	54	54	49	45	43	40	37	34	32	30
4	73	63	55	49	67	58	51	46	48	43	39	39	35	32	30	28	26
5	67	56	48	42	61	51	44	39	43	38	34	35	31	28	27	25	23
6	62	50	42	37	56	46	39	34	39	33	29	31	28	25	25	22	20
7	57	45	38	32	52	42	35	30	35	30	26	29	25	22	23	20	18
8	53	41	34	28	48	38	31	27	32	27	23	26	22	19	21	18	16
9	49	38	30	25	45	35	28	24	29	24	21	24	20	17	19	16	14
10	46	34	27	23	42	32	25	21	27	22	19	22	18	16	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11322	11322	11322
5°	11323	10985	10986
10°	11227	10639	10512
15°	11072	10207	9952
20°	10870	9715	9314
25°	10617	9184	8691
30°	10371	8643	7991
35°	10099	8094	7307
40°	9776	7503	6605
45°	9473	6916	5908
50°	9128	6276	5202
55°	8755	5619	4472
60°	8343	4923	3752
65°	7942	4123	3058
70°	7376	3282	2338
75°	6648	2388	1635
80°	5552	1466	1175
85°	4177	846	646

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9473 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.6	1.7
10°-20°	364.0	4.6
20°-30°	525.5	6.7
30°-40°	595.6	7.6
40°-50°	575.1	7.3
50°-60°	478.1	6.1
60°-70°	330.0	4.2
70°-80°	166.8	2.1
80°-90°	45.9	0.6
90°-100°	108.7	1.4
100°-110°	325.7	4.2
110°-120°	553.2	7.1
120°-130°	729.7	9.3
130°-140°	819.5	10.5
140°-150°	805.5	10.3
150°-160°	677.5	8.6
160°-170°	450.8	5.7
170°-180°	157.8	2.0
0°-30°	1020.1	13.0
0°-40°	1615.7	20.6
0°-60°	2668.9	34.0
0°-90°	3211.6	41.0
90°-120°	987.7	12.6
90°-150°	3342.3	42.6
90°-180°	4628.0	59.0
0°-180°	7840.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1388	1388	1388	1388	1388	
5°	1386	1382	1369	1380	1378	132
15°	1320	1311	1284	1282	1275	372
25°	1194	1175	1131	1113	1102	550
35°	1032	998	945	909	890	645
45°	842	803	739	687	668	649
55°	638	595	526	471	451	571
65°	434	388	320	274	262	428
75°	231	191	141	117	111	243
85°	57	36	33	31	31	63
90°	4	18	28	36	39	9
95°	77	89	98	102	102	84
105°	301	302	307	311	315	319
115°	562	562	560	559	557	555
125°	819	819	818	815	813	730
135°	1057	1064	1064	1062	1058	817
145°	1284	1289	1290	1289	1285	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°	1388.4	1388.4	1388.4	1388.4	1388.4
2.5°	1392.6	1388.4	1376.7	1388.4	1387.3
5°	1386.3	1382.0	1369.2	1379.9	1377.7
7.5°	1376.7	1372.4	1356.5	1363.9	1360.7
10°	1361.8	1356.5	1337.4	1341.6	1337.4
12.5°	1342.7	1336.3	1312.9	1315.0	1308.6
15°	1320.3	1310.8	1284.2	1282.1	1274.6
17.5°	1294.8	1281.0	1250.2	1244.9	1234.2
20°	1264.0	1250.2	1214.0	1205.5	1191.7
22.5°	1230.0	1214.0	1174.7	1160.9	1150.3
25°	1193.8	1174.7	1131.1	1113.0	1102.4
27.5°	1156.6	1133.2	1087.5	1066.3	1051.4
30°	1117.3	1090.7	1040.8	1014.2	997.2
32.5°	1075.8	1045.0	992.9	961.0	945.1
35°	1032.2	998.2	945.1	908.9	889.8
37.5°	986.5	951.5	893.0	853.7	834.5
40°	937.6	902.6	842.0	797.3	778.2
42.5°	890.9	853.7	789.9	744.2	724.0
45°	842.0	802.6	738.8	686.7	667.6
47.5°	792.0	751.6	685.7	631.5	610.2
50°	741.0	699.5	631.5	578.3	558.1
52.5°	688.9	648.5	578.3	524.1	502.8
55°	637.8	595.3	526.2	470.9	450.7
57.5°	587.9	543.2	475.2	418.9	404.0
60°	533.7	491.1	423.1	367.8	350.8
62.5°	484.8	440.1	370.0	320.0	307.2
65°	433.7	388.0	320.0	274.3	261.5
67.5°	380.6	337.0	273.2	232.8	217.9
70°	330.6	286.0	225.4	190.3	179.7
72.5°	277.5	238.1	181.8	153.1	143.5
75°	230.7	191.4	141.4	116.9	110.6
77.5°	181.8	147.8	105.2	88.2	86.1
80°	135.0	104.2	72.3	69.1	68.0
82.5°	94.6	67.0	52.1	50.0	48.9
85°	57.4	36.1	33.0	30.8	30.8
87.5°	24.5	15.9	14.9	13.8	14.9
90°	3.9	18.1	28.4	36.1	38.7
92.5°	33.5	50.3	56.8	60.6	61.9
95°	77.4	89.0	98.0	101.9	101.9
97.5°	123.9	134.2	144.5	149.7	149.7
100°	180.6	185.8	197.4	200.0	200.0
102.5°	240.0	241.3	251.6	255.4	256.7
105°	300.6	301.9	307.0	310.9	314.8
107.5°	363.8	365.1	366.4	371.6	370.3
110°	428.3	430.9	429.6	427.0	430.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	495.4	495.4	492.8	492.8	492.8
115°	562.5	562.5	559.9	558.6	557.3
117.5°	625.7	625.7	624.4	620.5	616.7
120°	688.9	694.1	690.2	683.8	686.3
122.5°	754.7	756.0	754.7	750.8	744.4
125°	819.2	819.2	817.9	815.4	812.8
127.5°	877.3	881.2	878.6	876.0	874.7
130°	939.2	943.1	943.1	940.5	935.3
132.5°	1002.4	1005.0	1003.7	1001.1	999.8
135°	1056.6	1064.3	1064.3	1061.8	1057.9
137.5°	1117.2	1121.1	1123.7	1119.8	1121.1
140°	1177.9	1180.5	1180.5	1179.2	1177.9
142.5°	1233.4	1235.9	1234.6	1234.6	1234.6
145°	1283.7	1288.8	1290.1	1288.8	1285.0
147.5°	1335.3	1341.7	1340.4	1339.1	1337.9
150°	1381.7	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)