

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: P1033736

Luminaire Tested: S124DIW-B795D1340UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033736
REPORT IS A COMBINATION OF REPORTS P998069 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1340UB50-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

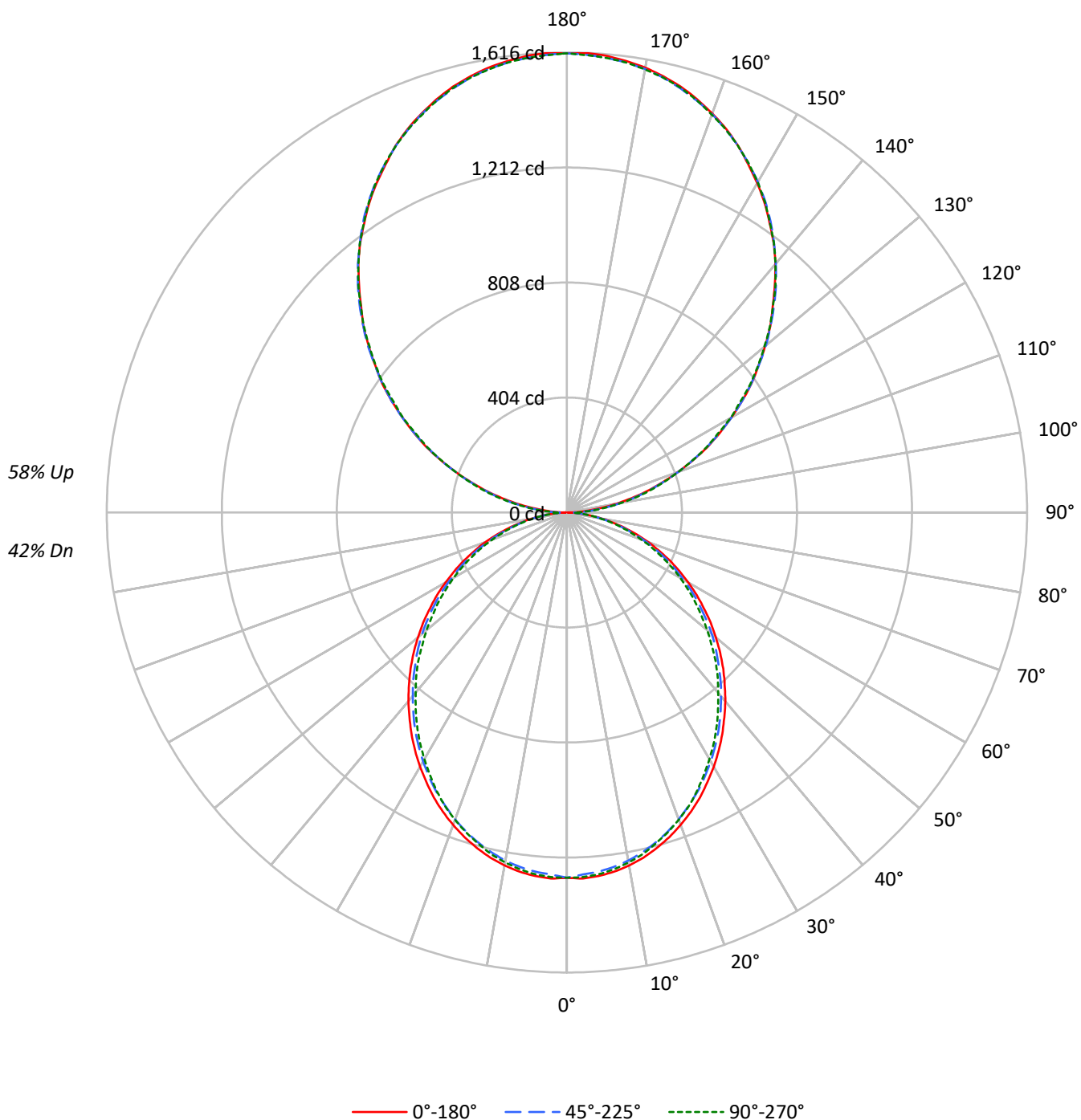
Lumens per Lamp: N/A
Luminaire Lumens: 7772.0 lumens
Efficiency: N/A
Efficacy: 99.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	79	79	79	63	63	63	49	49	49
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	41
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35
3	80	70	63	57	73	65	58	53	53	49	45	43	40	37	34	32	30
4	73	62	54	48	66	57	50	45	47	42	38	39	35	32	30	28	26
5	67	55	47	41	61	51	44	39	42	37	33	35	31	28	27	24	22
6	62	50	42	36	56	46	39	33	38	33	29	31	27	24	25	22	20
7	57	45	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17
8	53	41	33	28	48	37	31	26	32	26	22	26	22	19	21	18	16
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14
10	46	34	27	22	42	31	25	21	27	21	18	22	18	15	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10462	10462	10462
5°	10470	10161	10174
10°	10382	9879	9810
15°	10233	9543	9399
20°	10043	9181	8975
25°	9829	8797	8518
30°	9571	8383	8016
35°	9303	7958	7531
40°	9025	7503	7014
45°	8733	7044	6532
50°	8409	6600	5998
55°	8058	6082	5467
60°	7697	5514	4915
65°	7285	4927	4292
70°	6811	4222	3625
75°	6104	3403	2904
80°	5199	2460	2042
85°	4039	1371	1098

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8733 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.9	1.6
10°-20°	340.7	4.4
20°-30°	501.4	6.5
30°-40°	582.8	7.5
40°-50°	582.8	7.5
50°-60°	509.7	6.6
60°-70°	378.4	4.9
70°-80°	214.7	2.8
80°-90°	64.9	0.8
90°-100°	105.1	1.4
100°-110°	314.9	4.1
110°-120°	535.0	6.9
120°-130°	705.6	9.1
130°-140°	792.5	10.2
140°-150°	778.9	10.0
150°-160°	655.1	8.4
160°-170°	435.9	5.6
170°-180°	152.6	2.0
0°-30°	963.0	12.4
0°-40°	1545.9	19.9
0°-60°	2638.4	33.9
0°-90°	3296.4	42.4
90°-120°	955.0	12.3
90°-150°	3232.0	41.6
90°-180°	4476.0	57.6
0°-180°	7772.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1282	1278	1266	1278	1276	122
15°	1220	1216	1201	1207	1204	344
25°	1105	1098	1084	1085	1080	509
35°	951	944	929	922	917	595
45°	776	769	752	741	738	598
55°	587	584	570	557	551	526
65°	398	393	382	372	367	394
75°	212	207	202	197	196	225
85°	56	56	54	54	52	60
90°	4	18	27	35	37	9
95°	75	86	95	99	99	81
105°	291	292	297	301	304	308
115°	544	544	541	540	539	536
125°	792	792	791	788	786	706
135°	1022	1029	1029	1027	1023	790
145°	1241	1246	1248	1246	1242	777
155°	1422	1422	1421	1426	1421	654
165°	1548	1544	1542	1549	1544	437
175°	1610	1604	1603	1612	1603	153
180°	1613	1613	1613	1613	1613	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1283.0	1283.0	1283.0	1283.0	1283.0
2.5°	1287.1	1284.0	1272.7	1283.0	1281.9
5°	1281.9	1277.8	1266.5	1277.8	1275.8
7.5°	1272.7	1268.6	1256.2	1265.5	1264.5
10°	1259.3	1255.2	1241.9	1250.1	1248.0
12.5°	1241.9	1237.7	1223.3	1232.6	1229.5
15°	1220.3	1216.2	1200.7	1206.9	1203.8
17.5°	1195.6	1190.5	1176.1	1180.2	1178.1
20°	1167.8	1162.7	1147.3	1150.4	1148.3
22.5°	1138.0	1130.8	1115.4	1121.6	1117.5
25°	1105.1	1097.9	1083.5	1084.6	1080.5
27.5°	1068.1	1060.9	1047.6	1045.5	1040.4
30°	1031.1	1022.9	1009.5	1005.4	1000.3
32.5°	992.0	984.8	970.5	965.3	960.2
35°	950.9	943.7	929.3	922.1	917.0
37.5°	907.7	901.6	886.2	879.0	871.8
40°	865.6	857.4	842.0	831.7	826.5
42.5°	820.4	816.3	798.8	786.4	783.4
45°	776.2	769.0	752.5	741.2	738.1
47.5°	729.9	724.8	709.3	697.0	688.8
50°	682.6	678.5	664.1	649.7	643.5
52.5°	636.3	631.2	615.8	603.4	595.2
55°	587.0	583.9	569.5	557.2	551.0
57.5°	540.7	537.7	523.3	510.9	504.8
60°	492.4	487.3	473.9	464.7	459.5
62.5°	445.1	441.0	426.6	418.4	413.3
65°	397.8	392.7	382.4	372.1	367.0
67.5°	349.5	345.4	335.1	324.9	323.8
70°	305.3	298.1	289.9	281.7	278.6
72.5°	258.0	250.8	244.7	238.5	235.4
75°	211.8	206.6	201.5	197.4	196.4
77.5°	166.5	164.5	159.3	158.3	155.2
80°	126.4	123.4	121.3	119.3	118.2
82.5°	87.4	86.4	86.4	85.3	84.3
85°	55.5	55.5	53.5	53.5	52.4
87.5°	26.7	25.7	24.7	24.7	24.7
90°	3.7	17.5	27.4	34.9	37.4
92.5°	32.4	48.7	54.9	58.6	59.9
95°	74.9	86.1	94.8	98.6	98.6
97.5°	119.8	129.7	139.7	144.7	144.7
100°	174.7	179.6	190.9	193.4	193.4
102.5°	232.0	233.3	243.3	247.0	248.3
105°	290.7	291.9	296.9	300.6	304.4
107.5°	351.8	353.0	354.3	359.3	358.0
110°	414.2	416.7	415.4	412.9	416.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	479.0	479.0	476.5	476.5	476.5
115°	543.9	543.9	541.4	540.2	538.9
117.5°	605.0	605.0	603.8	600.1	596.3
120°	666.2	671.2	667.4	661.2	663.7
122.5°	729.8	731.0	729.8	726.0	719.8
125°	792.2	792.2	790.9	788.4	785.9
127.5°	848.3	852.0	849.6	847.1	845.8
130°	908.2	911.9	911.9	909.4	904.4
132.5°	969.3	971.8	970.6	968.1	966.8
135°	1021.7	1029.2	1029.2	1026.7	1023.0
137.5°	1080.3	1084.1	1086.6	1082.8	1084.1
140°	1139.0	1141.5	1141.5	1140.2	1139.0
142.5°	1192.6	1195.1	1193.9	1193.9	1193.9
145°	1241.3	1246.3	1247.5	1246.3	1242.5
147.5°	1291.2	1297.4	1296.2	1294.9	1293.7
150°	1336.1	1341.1	1341.1	1341.1	1339.8
152.5°	1378.5	1381.0	1382.2	1386.0	1382.2
155°	1422.2	1422.2	1420.9	1425.9	1420.9
157.5°	1459.6	1457.1	1457.1	1460.8	1457.1
160°	1492.0	1490.8	1489.5	1493.3	1487.0
162.5°	1522.0	1518.2	1517.0	1524.5	1518.2
165°	1548.2	1544.4	1541.9	1549.4	1544.4
167.5°	1569.4	1564.4	1564.4	1571.9	1564.4
170°	1586.8	1580.6	1581.8	1589.3	1580.6
172.5°	1599.3	1594.3	1594.3	1603.0	1594.3
175°	1610.5	1604.3	1603.0	1611.8	1603.0
177.5°	1615.5	1609.3	1609.3	1618.0	1608.0
180°	1613.0	1613.0	1613.0	1613.0	1613.0

(END OF REPORT)