

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: P1032484

Luminaire Tested: S124DIW-B1020D1340UB2750-4F0-XX-W2A-D1_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032484
REPORT IS A COMBINATION OF REPORTS P996701 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1340UB2750-4F0-XX-W2A-D1_5000K
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

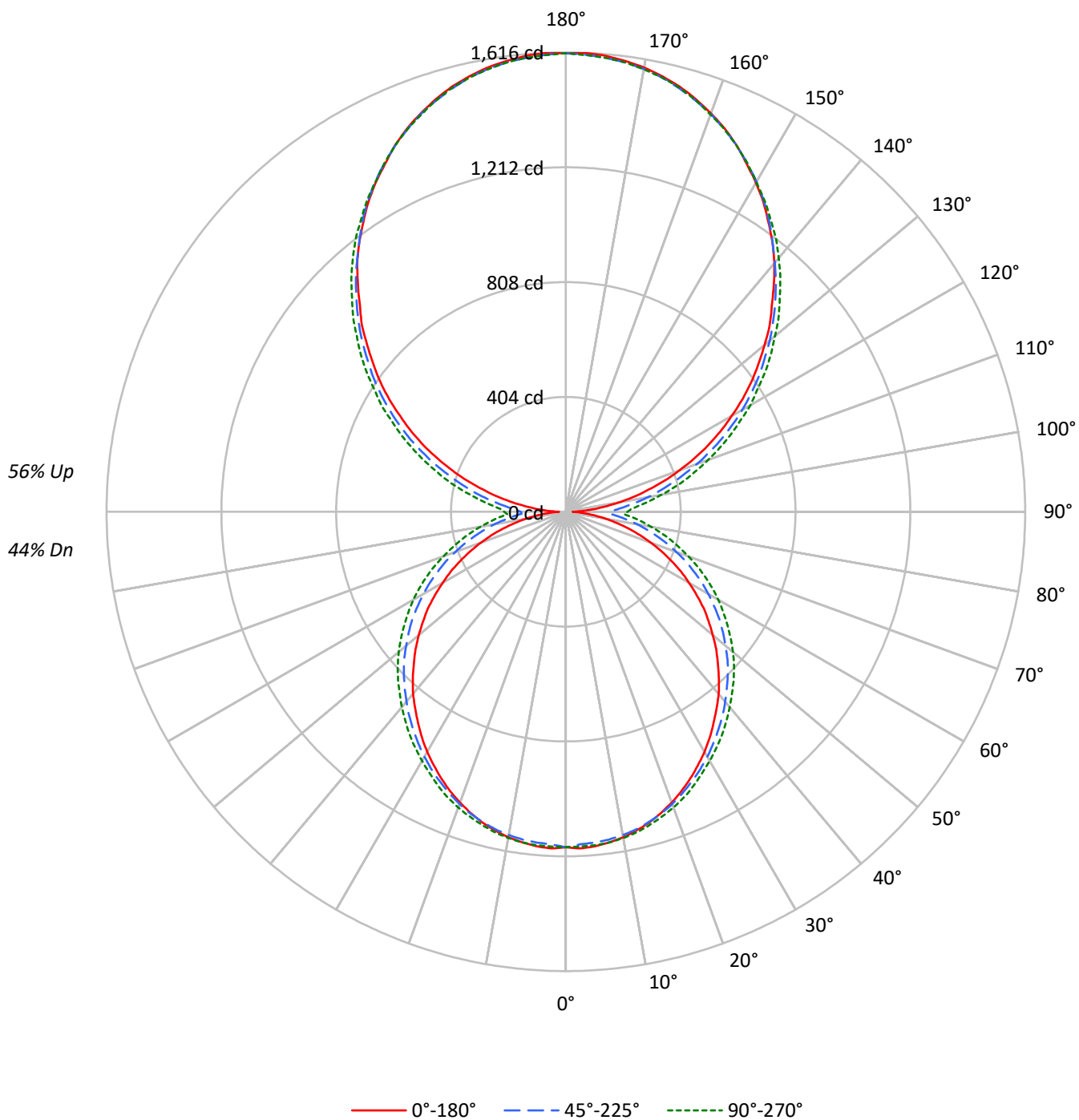
Lumens per Lamp: N/A
Luminaire Lumens: 8502.0 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 88.9
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	50	50	50
1	96	91	87	83	87	83	80	76	69	66	64	55	54	52	43	42	41
2	87	79	72	67	79	72	67	62	60	56	52	48	45	43	37	35	34
3	79	69	61	55	72	63	57	51	52	47	43	42	39	36	33	30	28
4	72	61	53	46	65	56	49	43	46	41	37	37	33	30	29	26	24
5	66	54	46	39	60	50	42	37	41	36	31	33	29	26	26	23	21
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	24	21	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	22	18	16
8	52	39	31	26	47	36	29	24	30	25	21	25	21	18	20	17	14
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13
10	45	33	25	21	41	30	24	19	26	20	17	21	17	14	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9622	9622	9622
5°	9649	9371	9388
10°	9586	9187	9160
15°	9496	8980	8904
20°	9363	8755	8654
25°	9213	8507	8386
30°	9052	8262	8112
35°	8868	8012	7867
40°	8720	7771	7614
45°	8503	7545	7391
50°	8318	7289	7155
55°	8126	7042	6883
60°	7829	6734	6628
65°	7501	6402	6320
70°	7103	6023	5965
75°	6550	5602	5627
80°	5923	5172	5272
85°	5094	4741	4985

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8503 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.8	1.3
10°-20°	320.3	3.8
20°-30°	484.4	5.7
30°-40°	586.0	6.9
40°-50°	619.5	7.3
50°-60°	583.0	6.9
60°-70°	483.8	5.7
70°-80°	339.5	4.0
80°-90°	194.8	2.3
90°-100°	219.1	2.6
100°-110°	399.3	4.7
110°-120°	591.6	7.0
120°-130°	737.5	8.7
130°-140°	806.2	9.5
140°-150°	781.6	9.2
150°-160°	655.1	7.7
160°-170°	435.9	5.1
170°-180°	152.6	1.8
0°-30°	916.5	10.8
0°-40°	1502.5	17.7
0°-60°	2705.0	31.8
0°-90°	3723.1	43.8
90°-120°	1210.0	14.2
90°-150°	3535.3	41.6
90°-180°	4779.0	56.2
0°-180°	8502.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1180	1180	1180	1180	1180	
5°	1181	1177	1168	1179	1177	112
15°	1132	1134	1130	1142	1140	319
25°	1036	1044	1048	1062	1064	477
35°	906	922	936	954	958	568
45°	756	781	806	828	835	584
55°	592	620	659	686	694	528
65°	410	452	497	530	540	406
75°	227	276	332	369	381	241
85°	70	126	185	225	238	73
90°	25	92	158	204	217	20
95°	92	147	210	249	261	95
105°	303	330	384	421	435	322
115°	552	564	604	631	639	545
125°	798	796	828	850	856	711
135°	1024	1032	1041	1060	1064	793
145°	1243	1246	1248	1254	1256	778
155°	1422	1422	1421	1426	1421	655
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°	1180.0	1180.0	1180.0	1180.0	1180.0
2.5°	1185.3	1181.3	1170.7	1180.0	1178.6
5°	1181.3	1177.3	1168.1	1178.6	1177.3
7.5°	1173.4	1170.7	1162.8	1174.7	1173.4
10°	1162.8	1161.5	1154.9	1166.8	1165.4
12.5°	1148.3	1148.3	1144.3	1154.9	1154.9
15°	1132.4	1133.7	1129.8	1141.7	1140.3
17.5°	1111.3	1115.2	1113.9	1125.8	1124.5
20°	1088.8	1092.8	1094.1	1107.3	1107.3
22.5°	1063.7	1069.0	1071.6	1084.8	1087.5
25°	1035.9	1043.9	1047.8	1062.4	1063.7
27.5°	1005.6	1017.4	1022.7	1035.9	1037.3
30°	975.2	985.7	995.0	1009.5	1012.2
32.5°	942.1	955.3	965.9	983.1	985.7
35°	906.4	922.3	935.5	954.0	958.0
37.5°	870.8	889.3	905.1	923.6	927.6
40°	836.4	853.6	872.1	891.9	897.2
42.5°	796.8	816.6	839.1	861.5	865.5
45°	755.8	780.9	806.0	828.5	835.1
47.5°	717.5	742.6	771.7	794.1	802.1
50°	675.2	704.3	733.4	759.8	767.7
52.5°	632.9	662.0	696.4	722.8	730.7
55°	592.0	619.7	659.4	685.8	693.7
57.5°	545.7	580.1	618.4	650.1	656.7
60°	500.8	535.1	578.8	609.1	619.7
62.5°	457.2	495.5	539.1	569.5	580.1
65°	409.6	451.9	496.8	529.9	540.4
67.5°	364.7	409.6	457.2	490.2	500.8
70°	318.4	363.4	413.6	449.3	458.5
72.5°	273.5	319.8	373.9	408.3	418.9
75°	227.3	276.2	331.7	368.7	380.6
77.5°	183.7	235.2	293.3	330.3	343.6
80°	144.0	196.9	255.0	294.7	305.2
82.5°	104.4	159.9	218.0	259.0	270.9
85°	70.0	125.5	185.0	224.6	237.8
87.5°	43.6	97.8	155.9	194.2	206.1
90°	24.8	91.5	158.2	204.0	217.1
92.5°	52.2	114.8	177.8	218.5	230.4
95°	92.1	146.9	209.8	249.2	261.1
97.5°	135.7	183.9	248.1	287.4	299.3
100°	189.2	228.5	291.3	329.5	338.7
102.5°	246.5	276.9	337.1	375.2	387.0
105°	302.6	330.2	384.1	420.8	435.2
107.5°	363.7	387.4	434.9	472.9	480.9
110°	424.8	445.8	490.7	518.6	533.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	488.2	504.1	545.2	574.3	584.9
115°	551.8	563.7	603.5	631.4	639.3
117.5°	612.9	620.9	659.3	683.3	690.1
120°	672.8	681.8	716.3	736.5	749.6
122.5°	736.4	737.6	772.1	794.7	797.8
125°	797.5	796.2	827.9	850.5	855.9
127.5°	853.6	856.0	880.0	901.3	909.2
130°	912.2	914.5	935.7	957.0	959.9
132.5°	973.3	974.4	989.1	1009.1	1015.7
135°	1024.3	1031.8	1041.1	1059.7	1064.0
137.5°	1082.9	1085.4	1093.2	1109.2	1117.1
140°	1141.6	1142.8	1144.1	1160.0	1165.4
142.5°	1193.9	1196.4	1193.9	1208.4	1213.7
145°	1242.6	1246.3	1247.5	1254.2	1255.7
147.5°	1292.5	1297.4	1296.2	1296.2	1300.3
150°	1337.4	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)