

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: P1033580

Luminaire Tested: S124DIW-B575D1340UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033580
REPORT IS A COMBINATION OF REPORTS P997726 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1340UB40-4F0-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

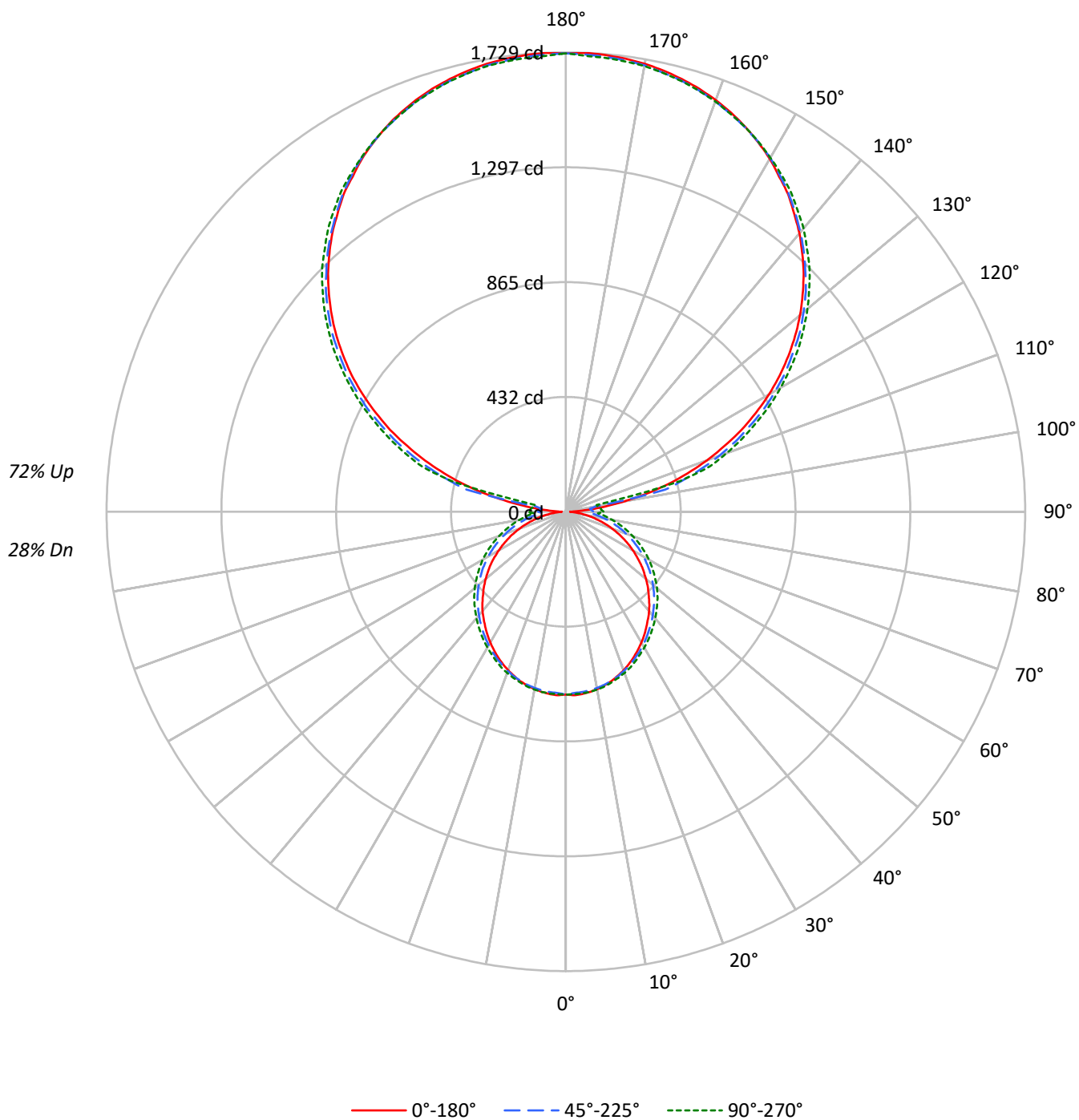
Lumens per Lamp: N/A
Luminaire Lumens: 7688.0 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 66.1
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36
1	92	88	84	80	82	79	75	72	61	59	57	46	44	43	31	30	29
2	84	76	70	65	75	68	63	59	53	50	47	40	37	35	27	25	24
3	76	67	60	54	68	60	54	49	47	43	39	35	32	29	24	22	20
4	70	59	51	45	62	53	46	41	41	37	33	31	28	25	21	19	17
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15
6	58	47	39	33	52	42	35	30	33	28	24	25	21	19	17	15	13
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11
8	50	38	30	25	44	34	28	23	27	22	19	20	17	14	14	12	10
9	46	34	27	22	41	31	25	20	25	20	17	19	15	13	13	11	9
10	43	31	24	20	39	28	22	18	23	18	15	17	14	11	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5611	5611	5611
5°	5627	5465	5475
10°	5590	5358	5342
15°	5538	5236	5192
20°	5460	5105	5047
25°	5373	4961	4890
30°	5279	4818	4730
35°	5172	4672	4587
40°	5086	4532	4440
45°	4959	4400	4310
50°	4850	4251	4173
55°	4738	4106	4014
60°	4565	3927	3865
65°	4375	3733	3686
70°	4143	3512	3479
75°	3818	3266	3281
80°	3455	3016	3075
85°	2969	2765	2907

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 5284 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	0.8
10°-20°	186.8	2.4
20°-30°	282.4	3.7
30°-40°	341.7	4.4
40°-50°	361.2	4.7
50°-60°	340.0	4.4
60°-70°	282.1	3.7
70°-80°	198.0	2.6
80°-90°	115.2	1.5
90°-100°	123.7	1.6
100°-110°	426.3	5.5
110°-120°	753.2	9.8
120°-130°	932.9	12.1
130°-140°	986.1	12.8
140°-150°	916.1	11.9
150°-160°	737.5	9.6
160°-170°	475.6	6.2
170°-180°	163.9	2.1
0°-30°	534.4	7.0
0°-40°	876.2	11.4
0°-60°	1577.4	20.5
0°-90°	2172.6	28.3
90°-120°	1303.2	17.0
90°-150°	4138.3	53.8
90°-180°	5515.0	71.7
0°-180°	7688.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	689	687	681	687	687	65
15°	660	661	659	666	665	186
25°	604	609	611	620	620	278
35°	529	538	546	556	559	331
45°	441	455	470	483	487	341
55°	345	361	384	400	404	308
65°	239	264	290	309	315	237
75°	132	161	193	215	222	141
85°	41	73	108	131	139	43
90°	16	61	105	135	144	12
95°	81	62	95	124	132	95
105°	395	418	454	484	444	414
115°	730	741	764	784	789	719
125°	1022	1027	1044	1062	1068	913
135°	1266	1265	1275	1290	1298	976
145°	1459	1462	1462	1468	1474	912
155°	1599	1600	1596	1601	1598	737
165°	1686	1680	1680	1690	1679	477
175°	1725	1718	1719	1730	1715	164
180°	1725	1725	1725	1725	1725	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	688.1	688.1	688.1	688.1	688.1
2.5°	691.2	688.9	682.7	688.1	687.3
5°	688.9	686.6	681.2	687.3	686.6
7.5°	684.2	682.7	678.1	685.0	684.2
10°	678.1	677.3	673.5	680.4	679.6
12.5°	669.6	669.6	667.3	673.5	673.5
15°	660.4	661.1	658.8	665.7	665.0
17.5°	648.0	650.3	649.6	656.5	655.7
20°	634.9	637.2	638.0	645.7	645.7
22.5°	620.3	623.4	624.9	632.6	634.2
25°	604.1	608.7	611.0	619.5	620.3
27.5°	586.4	593.3	596.4	604.1	604.9
30°	568.7	574.8	580.2	588.7	590.2
32.5°	549.4	557.1	563.3	573.3	574.8
35°	528.6	537.8	545.5	556.3	558.6
37.5°	507.8	518.6	527.8	538.6	540.9
40°	487.8	497.8	508.6	520.1	523.2
42.5°	464.6	476.2	489.3	502.4	504.7
45°	440.8	455.4	470.0	483.1	487.0
47.5°	418.4	433.0	450.0	463.1	467.7
50°	393.7	410.7	427.7	443.1	447.7
52.5°	369.1	386.0	406.1	421.5	426.1
55°	345.2	361.4	384.5	399.9	404.5
57.5°	318.2	338.3	360.6	379.1	383.0
60°	292.0	312.1	337.5	355.2	361.4
62.5°	266.6	289.0	314.4	332.1	338.3
65°	238.9	263.5	289.7	309.0	315.2
67.5°	212.7	238.9	266.6	285.9	292.0
70°	185.7	211.9	241.2	262.0	267.4
72.5°	159.5	186.5	218.1	238.1	244.3
75°	132.5	161.0	193.4	215.0	221.9
77.5°	107.1	137.2	171.1	192.6	200.3
80°	84.0	114.8	148.7	171.8	178.0
82.5°	60.9	93.2	127.1	151.0	158.0
85°	40.8	73.2	107.9	131.0	138.7
87.5°	25.4	57.0	90.9	113.3	120.2
90°	16.2	61.3	104.7	134.7	143.5
92.5°	31.0	55.3	98.8	128.0	134.2
95°	81.0	62.5	95.4	123.9	132.2
97.5°	144.7	195.5	91.6	118.0	126.3
100°	220.1	263.3	115.4	114.2	120.9
102.5°	305.3	337.7	382.5	112.1	118.3
105°	395.3	418.4	453.5	484.3	444.1
107.5°	479.2	496.1	532.2	557.9	568.5
110°	563.6	578.3	613.0	633.2	643.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	645.4	662.4	690.4	706.1	717.4
115°	729.8	740.7	764.0	783.5	788.9
117.5°	805.9	815.7	842.7	857.6	863.8
120°	882.6	890.1	911.1	929.1	932.7
122.5°	954.9	957.5	980.9	997.6	1000.4
125°	1022.5	1026.9	1043.6	1062.0	1067.9
127.5°	1088.3	1088.8	1110.6	1123.2	1127.4
130°	1150.7	1151.2	1167.5	1182.6	1187.3
132.5°	1208.8	1210.6	1225.0	1239.4	1242.7
135°	1266.1	1264.8	1275.3	1290.3	1297.5
137.5°	1317.7	1317.0	1326.5	1340.6	1343.2
140°	1368.0	1369.9	1373.2	1387.1	1392.2
142.5°	1412.5	1417.6	1418.1	1429.2	1432.3
145°	1458.9	1462.0	1462.0	1467.9	1473.6
147.5°	1495.0	1502.0	1500.7	1502.8	1507.2
150°	1535.0	1539.4	1538.1	1538.1	1539.4
152.5°	1567.8	1571.7	1569.1	1571.7	1570.4
155°	1598.8	1600.1	1596.2	1601.3	1597.5
157.5°	1625.9	1625.9	1620.7	1627.2	1620.7
160°	1649.1	1645.2	1643.9	1651.7	1643.9
162.5°	1669.7	1664.6	1663.3	1671.0	1662.0
165°	1686.5	1680.1	1680.1	1690.4	1678.8
167.5°	1700.7	1694.3	1693.0	1704.6	1691.7
170°	1712.3	1704.6	1705.9	1716.2	1703.3
172.5°	1720.1	1712.3	1713.6	1723.9	1709.7
175°	1725.2	1717.5	1718.8	1730.4	1714.9
177.5°	1729.1	1720.1	1722.6	1733.0	1717.5
180°	1725.2	1725.2	1725.2	1725.2	1725.2

(END OF REPORT)