

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: P1033581

Luminaire Tested: S124DIW-B575D1340UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033581
REPORT IS A COMBINATION OF REPORTS P997727 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-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

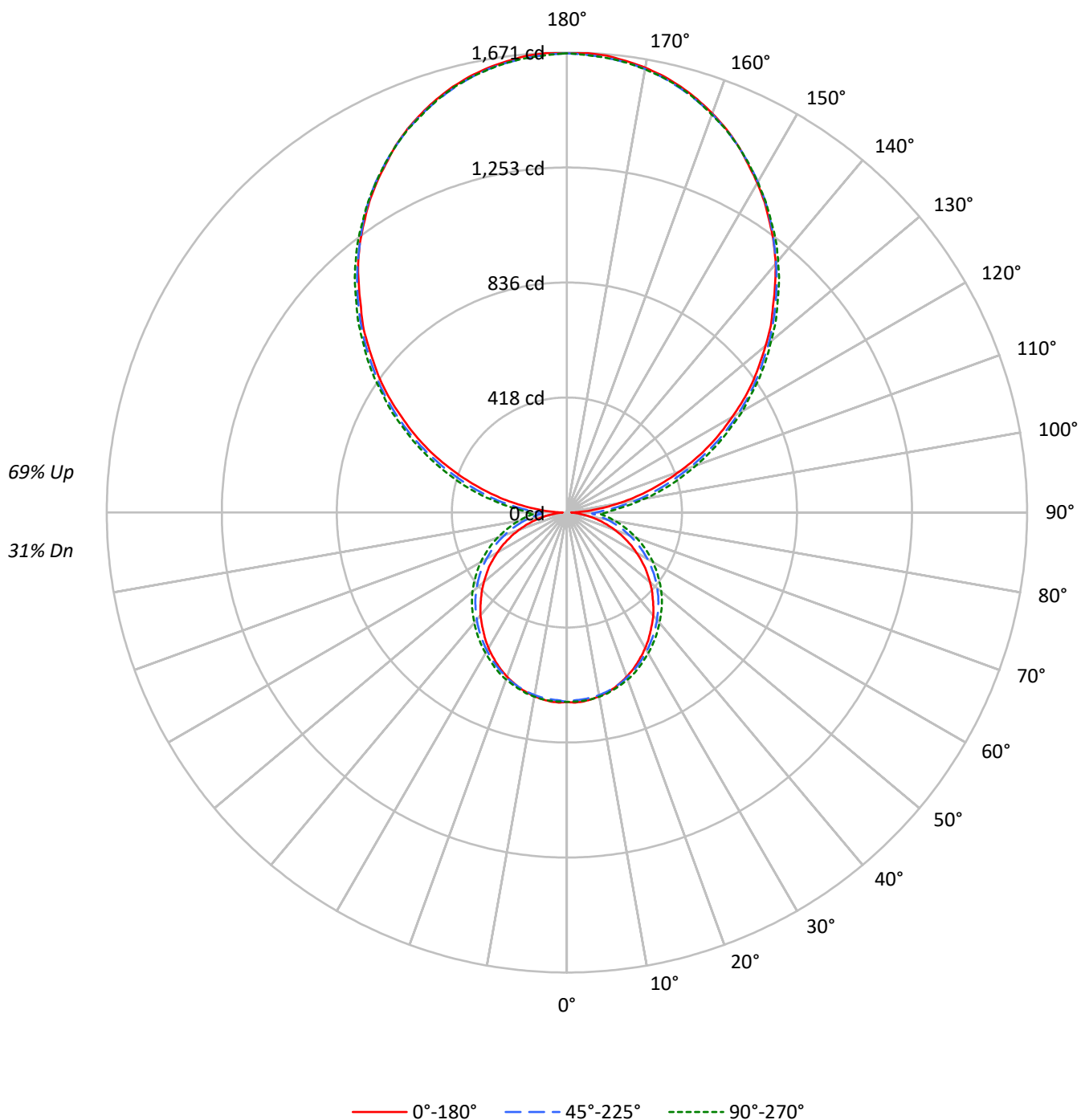
Lumens per Lamp: N/A
Luminaire Lumens: 6978.0 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39
1	93	88	84	81	83	80	76	73	63	60	58	47	46	44	33	32	31
2	84	77	71	65	75	69	64	59	55	51	48	41	39	37	29	27	26
3	77	67	60	54	69	61	54	49	48	43	40	36	33	31	25	23	22
4	70	59	51	45	62	53	47	41	42	37	34	32	29	26	22	20	19
5	64	53	45	39	57	47	40	35	38	33	29	29	25	22	20	18	16
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	18	16	14
7	54	42	34	29	49	38	31	26	30	25	22	23	20	17	17	14	12
8	50	38	31	25	45	35	28	23	28	23	19	21	18	15	15	13	11
9	47	35	27	22	42	31	25	21	25	20	17	19	16	13	14	12	10
10	43	32	25	20	39	29	22	18	23	18	15	18	14	12	13	11	9

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	0.9
10°-20°	186.8	2.7
20°-30°	282.4	4.0
30°-40°	341.7	4.9
40°-50°	361.2	5.2
50°-60°	340.0	4.9
60°-70°	282.1	4.0
70°-80°	198.0	2.8
80°-90°	115.2	1.7
90°-100°	175.2	2.5
100°-110°	374.9	5.4
110°-120°	586.3	8.4
120°-130°	748.3	10.7
130°-140°	827.6	11.9
140°-150°	807.1	11.6
150°-160°	677.5	9.7
160°-170°	450.8	6.5
170°-180°	157.8	2.3
0°-30°	534.4	7.7
0°-40°	876.2	12.6
0°-60°	1577.4	22.6
0°-90°	2172.6	31.1
90°-120°	1136.3	16.3
90°-150°	3519.3	50.4
90°-180°	4805.0	68.9
0°-180°	6978.0	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	14
95°	87	124	165	190	197	92
105°	308	324	358	381	391	327
115°	567	574	596	612	616	560
125°	822	822	840	852	854	733
135°	1058	1066	1071	1081	1082	819
145°	1284	1289	1290	1293	1293	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°	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°	45.1	88.8	128.5	153.8	161.3
95°	87.4	124.4	165.0	189.7	196.7
97.5°	133.1	165.8	207.7	232.9	239.9
100°	189.1	214.3	256.0	279.4	284.8
102.5°	248.5	266.7	306.3	330.1	337.6
105°	307.5	324.2	357.9	381.0	391.1
107.5°	370.7	385.1	413.4	437.9	442.0
110°	434.5	447.9	473.5	488.6	498.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	500.8	510.0	532.9	549.8	556.0
115°	567.1	574.1	596.1	611.8	615.9
117.5°	630.3	634.9	656.8	669.0	671.4
120°	692.8	700.3	718.7	727.7	736.4
122.5°	758.6	759.9	779.4	790.9	789.9
125°	822.3	821.5	839.5	851.6	853.6
127.5°	880.4	883.5	896.3	907.6	911.7
130°	941.5	944.6	957.0	968.2	967.7
132.5°	1004.7	1006.5	1014.5	1025.0	1028.3
135°	1058.1	1065.8	1071.2	1081.1	1081.8
137.5°	1118.7	1121.9	1127.6	1135.2	1140.4
140°	1179.4	1181.3	1182.0	1190.8	1193.3
142.5°	1234.2	1236.7	1234.6	1243.1	1246.2
145°	1284.5	1288.8	1290.1	1293.4	1292.7
147.5°	1336.1	1341.7	1340.4	1339.9	1341.8
150°	1382.5	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)