

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: P1034059

Luminaire Tested: S124RDIW-B350D1340UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034059
REPORT IS A COMBINATION OF REPORTS P1000345 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D1340UB50-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

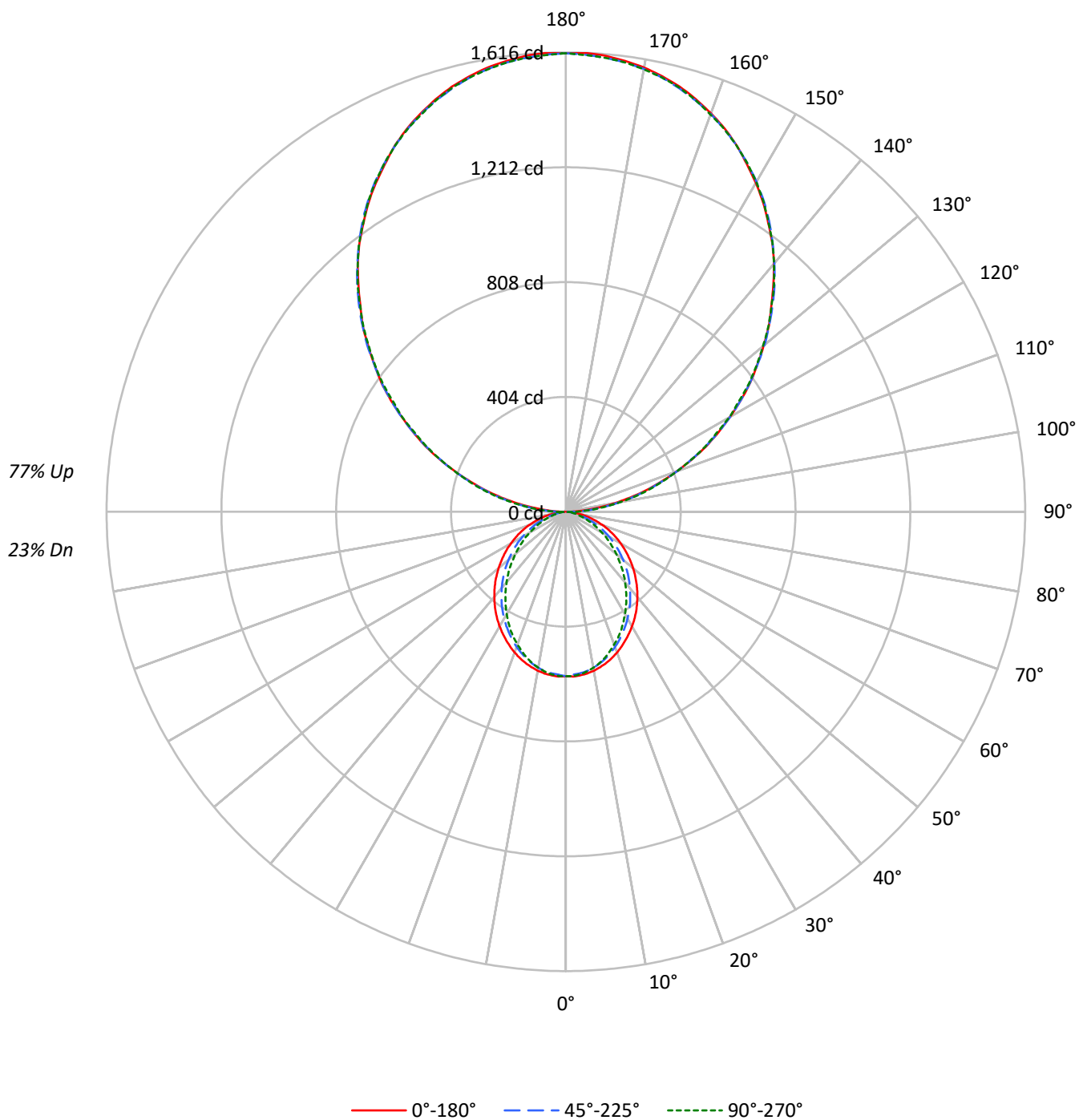
Lumens per Lamp: N/A
Luminaire Lumens: 5816.0 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	31	31	23
1	92	88	84	81	81	78	75	72	60	58	56	43	42	41	28	27	27	27	27	20
2	84	77	71	66	74	68	64	59	53	49	47	38	36	34	25	24	23	23	23	17
3	76	67	61	55	68	60	54	50	46	42	39	34	31	29	22	21	19	19	19	14
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	17	17	12
5	64	53	45	40	57	47	41	36	37	32	29	27	24	22	18	16	15	15	15	11
6	59	47	40	34	52	42	36	31	33	28	25	24	21	19	16	14	13	13	13	9
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	11	11	11	8
8	50	39	31	26	45	35	28	24	27	23	19	20	17	15	13	12	10	10	10	8
9	47	35	28	23	41	32	25	21	25	20	17	18	15	13	12	11	9	9	9	7
10	43	32	25	21	39	29	23	19	23	18	15	17	14	12	11	10	8	8	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4718	4718	4718
5°	4719	4579	4579
10°	4679	4434	4381
15°	4615	4254	4148
20°	4530	4049	3882
25°	4426	3827	3622
30°	4323	3602	3331
35°	4209	3373	3045
40°	4075	3127	2752
45°	3948	2882	2462
50°	3804	2616	2168
55°	3649	2342	1864
60°	3477	2051	1564
65°	3311	1719	1275
70°	3074	1367	974
75°	2769	995	682
80°	2316	610	491
85°	1739	351	268

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3948 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	0.9
10°-20°	151.7	2.6
20°-30°	219.0	3.8
30°-40°	248.2	4.3
40°-50°	239.7	4.1
50°-60°	199.3	3.4
60°-70°	137.5	2.4
70°-80°	69.5	1.2
80°-90°	21.1	0.4
90°-100°	105.1	1.8
100°-110°	314.9	5.4
110°-120°	535.0	9.2
120°-130°	705.6	12.1
130°-140°	792.5	13.6
140°-150°	778.9	13.4
150°-160°	655.1	11.3
160°-170°	435.9	7.5
170°-180°	152.6	2.6
0°-30°	425.2	7.3
0°-40°	673.4	11.6
0°-60°	1112.3	19.1
0°-90°	1340.4	23.0
90°-120°	955.0	16.4
90°-150°	3232.0	55.6
90°-180°	4476.0	77.0
0°-180°	5816.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	579	579	579	579	579	
5°	578	576	571	575	574	55
15°	550	546	535	534	531	155
25°	498	490	471	464	460	229
35°	430	416	394	379	371	269
45°	351	334	308	286	278	271
55°	266	248	219	196	188	238
65°	181	162	133	114	109	179
75°	96	80	59	49	46	101
85°	24	15	14	13	13	26
90°	4	18	27	35	37	7
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°	578.6	578.6	578.6	578.6	578.6
2.5°	580.4	578.6	573.8	578.6	578.2
5°	577.7	576.0	570.7	575.1	574.2
7.5°	573.8	572.0	565.3	568.4	567.1
10°	567.6	565.3	557.4	559.1	557.4
12.5°	559.6	556.9	547.2	548.1	545.4
15°	550.3	546.3	535.2	534.3	531.2
17.5°	539.6	533.9	521.0	518.8	514.4
20°	526.8	521.0	506.0	502.4	496.7
22.5°	512.6	506.0	489.6	483.8	479.4
25°	497.6	489.6	471.4	463.9	459.5
27.5°	482.0	472.3	453.3	444.4	438.2
30°	465.7	454.6	433.8	422.7	415.6
32.5°	448.4	435.5	413.8	400.5	393.9
35°	430.2	416.0	393.9	378.8	370.8
37.5°	411.2	396.5	372.2	355.8	347.8
40°	390.8	376.2	350.9	332.3	324.3
42.5°	371.3	355.8	329.2	310.1	301.7
45°	350.9	334.5	307.9	286.2	278.2
47.5°	330.1	313.2	285.8	263.2	254.3
50°	308.8	291.5	263.2	241.0	232.6
52.5°	287.1	270.3	241.0	218.4	209.6
55°	265.8	248.1	219.3	196.3	187.9
57.5°	245.0	226.4	198.0	174.6	168.4
60°	222.4	204.7	176.3	153.3	146.2
62.5°	202.0	183.4	154.2	133.4	128.0
65°	180.8	161.7	133.4	114.3	109.0
67.5°	158.6	140.4	113.9	97.0	90.8
70°	137.8	119.2	93.9	79.3	74.9
72.5°	115.6	99.2	75.8	63.8	59.8
75°	96.1	79.8	58.9	48.7	46.1
77.5°	75.8	61.6	43.9	36.8	35.9
80°	56.3	43.4	30.1	28.8	28.4
82.5°	39.4	27.9	21.7	20.8	20.4
85°	23.9	15.1	13.7	12.8	12.8
87.5°	10.2	6.6	6.2	5.8	6.2
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)