

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: P1034043

Luminaire Tested: S124RDIW-B350D1340UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034043
REPORT IS A COMBINATION OF REPORTS P1000307 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D1340UB27-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

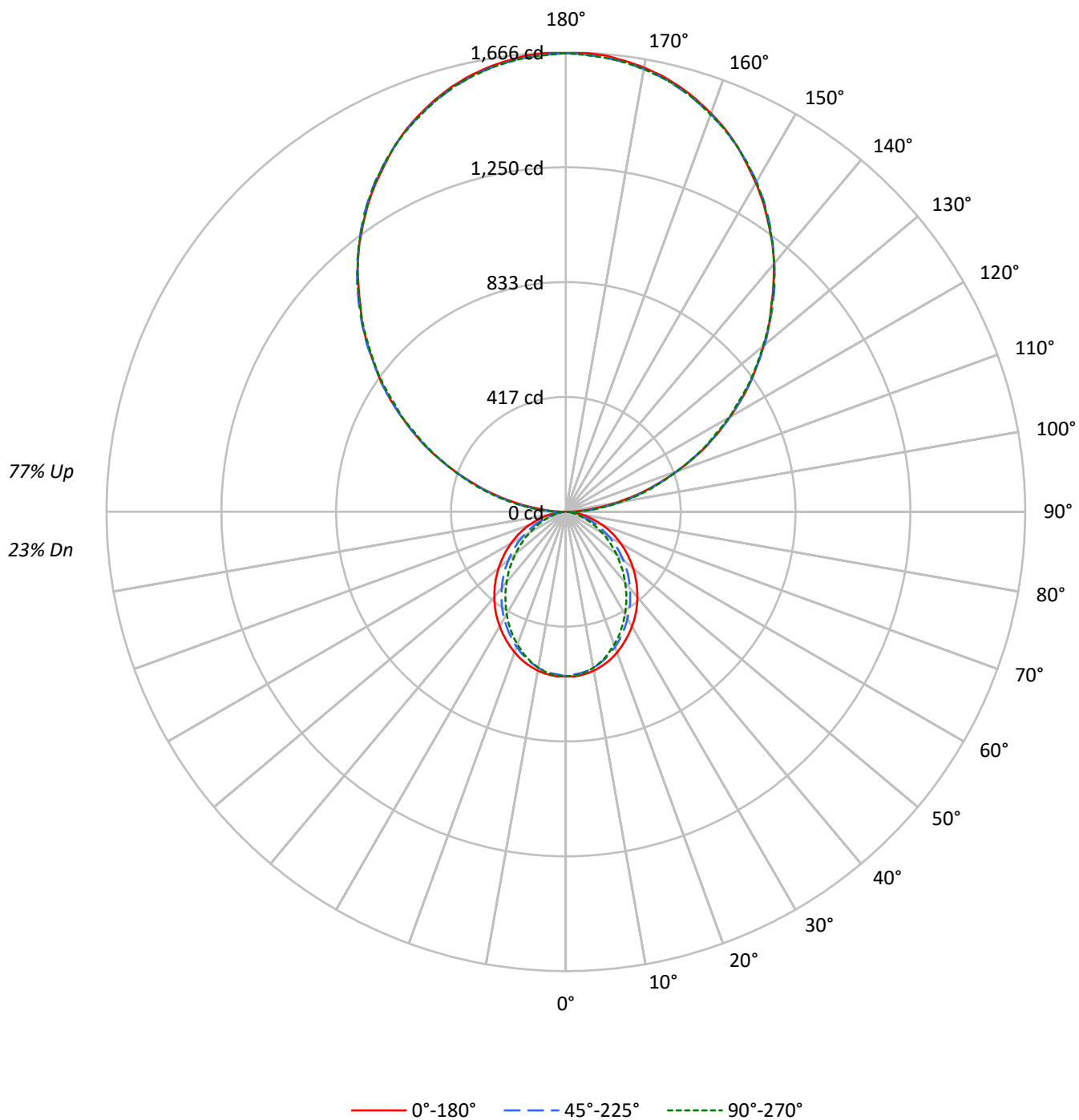
Lumens per Lamp: N/A
Luminaire Lumens: 5996.0 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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					10
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°	4863	4863	4863
5°	4864	4719	4719
10°	4823	4570	4516
15°	4757	4384	4275
20°	4670	4173	4001
25°	4561	3945	3733
30°	4454	3713	3432
35°	4338	3477	3139
40°	4200	3223	2837
45°	4069	2971	2538
50°	3921	2695	2234
55°	3761	2414	1921
60°	3583	2114	1612
65°	3412	1772	1313
70°	3168	1410	1004
75°	2856	1025	702
80°	2385	631	504
85°	1797	364	277

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4069 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.1	0.9
10°-20°	156.4	2.6
20°-30°	225.7	3.8
30°-40°	255.9	4.3
40°-50°	247.0	4.1
50°-60°	205.4	3.4
60°-70°	141.8	2.4
70°-80°	71.6	1.2
80°-90°	21.7	0.4
90°-100°	108.4	1.8
100°-110°	324.7	5.4
110°-120°	551.6	9.2
120°-130°	727.5	12.1
130°-140°	817.1	13.6
140°-150°	803.1	13.4
150°-160°	675.4	11.3
160°-170°	449.4	7.5
170°-180°	157.4	2.6
0°-30°	438.2	7.3
0°-40°	694.0	11.6
0°-60°	1146.4	19.1
0°-90°	1381.6	23.0
90°-120°	984.7	16.4
90°-150°	3332.3	55.6
90°-180°	4614.0	77.0
0°-180°	5996.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	596	596	596	596	596	
5°	596	594	588	593	592	57
15°	567	563	552	551	548	160
25°	513	505	486	478	474	236
35°	443	429	406	390	382	277
45°	362	345	317	295	287	279
55°	274	256	226	202	194	245
65°	186	167	138	118	112	184
75°	99	82	61	50	48	105
85°	25	16	14	13	13	27
90°	4	18	28	36	39	7
95°	77	89	98	102	102	84
105°	300	301	306	310	314	318
115°	561	561	558	557	556	553
125°	817	817	816	813	810	728
135°	1053	1061	1061	1059	1055	815
145°	1280	1285	1286	1285	1281	801
155°	1466	1466	1465	1470	1465	675
165°	1596	1592	1590	1598	1592	450
175°	1660	1654	1653	1662	1653	158
180°	1663	1663	1663	1663	1663	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	596.4	596.4	596.4	596.4	596.4
2.5°	598.2	596.4	591.4	596.4	595.9
5°	595.5	593.6	588.2	592.7	591.8
7.5°	591.4	589.5	582.7	585.9	584.5
10°	585.0	582.7	574.5	576.3	574.5
12.5°	576.7	574.0	564.0	564.9	562.1
15°	567.2	563.0	551.6	550.7	547.5
17.5°	556.2	550.3	537.0	534.7	530.2
20°	543.0	537.0	521.5	517.8	511.9
22.5°	528.3	521.5	504.6	498.7	494.1
25°	512.8	504.6	485.9	478.1	473.5
27.5°	496.8	486.8	467.1	458.0	451.6
30°	479.9	468.5	447.1	435.6	428.3
32.5°	462.1	448.9	426.5	412.8	406.0
35°	443.4	428.8	406.0	390.4	382.2
37.5°	423.8	408.7	383.6	366.7	358.5
40°	402.8	387.7	361.7	342.5	334.3
42.5°	382.7	366.7	339.3	319.7	311.0
45°	361.7	344.8	317.4	295.0	286.8
47.5°	340.2	322.8	294.5	271.2	262.1
50°	318.3	300.5	271.2	248.4	239.7
52.5°	295.9	278.6	248.4	225.1	216.0
55°	274.0	255.7	226.0	202.3	193.6
57.5°	252.5	233.3	204.1	179.9	173.5
60°	229.2	211.0	181.7	158.0	150.7
62.5°	208.2	189.1	158.9	137.5	132.0
65°	186.3	166.7	137.5	117.8	112.3
67.5°	163.5	144.8	117.4	100.0	93.6
70°	142.0	122.8	96.8	81.7	77.2
72.5°	119.2	102.3	78.1	65.8	61.6
75°	99.1	82.2	60.7	50.2	47.5
77.5°	78.1	63.5	45.2	37.9	37.0
80°	58.0	44.8	31.1	29.7	29.2
82.5°	40.6	28.8	22.4	21.5	21.0
85°	24.7	15.5	14.2	13.2	13.2
87.5°	10.5	6.8	6.4	5.9	6.4
90°	3.9	18.0	28.3	36.0	38.6
92.5°	33.4	50.2	56.6	60.5	61.7
95°	77.2	88.7	97.8	101.6	101.6
97.5°	123.5	133.8	144.1	149.2	149.2
100°	180.1	185.2	196.8	199.4	199.4
102.5°	239.2	240.5	250.8	254.7	256.0
105°	299.7	301.0	306.1	310.0	313.8
107.5°	362.7	364.0	365.3	370.4	369.1
110°	427.0	429.6	428.3	425.7	429.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	493.9	493.9	491.3	491.3	491.3
115°	560.8	560.8	558.2	556.9	555.6
117.5°	623.8	623.8	622.5	618.7	614.8
120°	686.8	692.0	688.1	681.7	684.3
122.5°	752.4	753.7	752.4	748.6	742.1
125°	816.8	816.8	815.5	812.9	810.3
127.5°	874.6	878.5	875.9	873.3	872.1
130°	936.4	940.2	940.2	937.7	932.5
132.5°	999.4	1002.0	1000.7	998.1	996.8
135°	1053.4	1061.1	1061.1	1058.6	1054.7
137.5°	1113.9	1117.7	1120.3	1116.4	1117.7
140°	1174.3	1176.9	1176.9	1175.6	1174.3
142.5°	1229.6	1232.2	1230.9	1230.9	1230.9
145°	1279.8	1284.9	1286.2	1284.9	1281.1
147.5°	1331.2	1337.7	1336.4	1335.1	1333.8
150°	1377.5	1382.7	1382.7	1382.7	1381.4
152.5°	1421.3	1423.8	1425.1	1429.0	1425.1
155°	1466.3	1466.3	1465.0	1470.2	1465.0
157.5°	1504.9	1502.3	1502.3	1506.2	1502.3
160°	1538.3	1537.0	1535.7	1539.6	1533.2
162.5°	1569.2	1565.3	1564.0	1571.8	1565.3
165°	1596.2	1592.3	1589.8	1597.5	1592.3
167.5°	1618.1	1612.9	1612.9	1620.6	1612.9
170°	1636.1	1629.6	1630.9	1638.6	1629.6
172.5°	1648.9	1643.8	1643.8	1652.8	1643.8
175°	1660.5	1654.1	1652.8	1661.8	1652.8
177.5°	1665.7	1659.2	1659.2	1668.2	1657.9
180°	1663.1	1663.1	1663.1	1663.1	1663.1

(END OF REPORT)