

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: P1034284

Luminaire Tested: S124RDIW-B795D470UB35-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034284
REPORT IS A COMBINATION OF REPORTS P1000860 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B795D470UB35-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

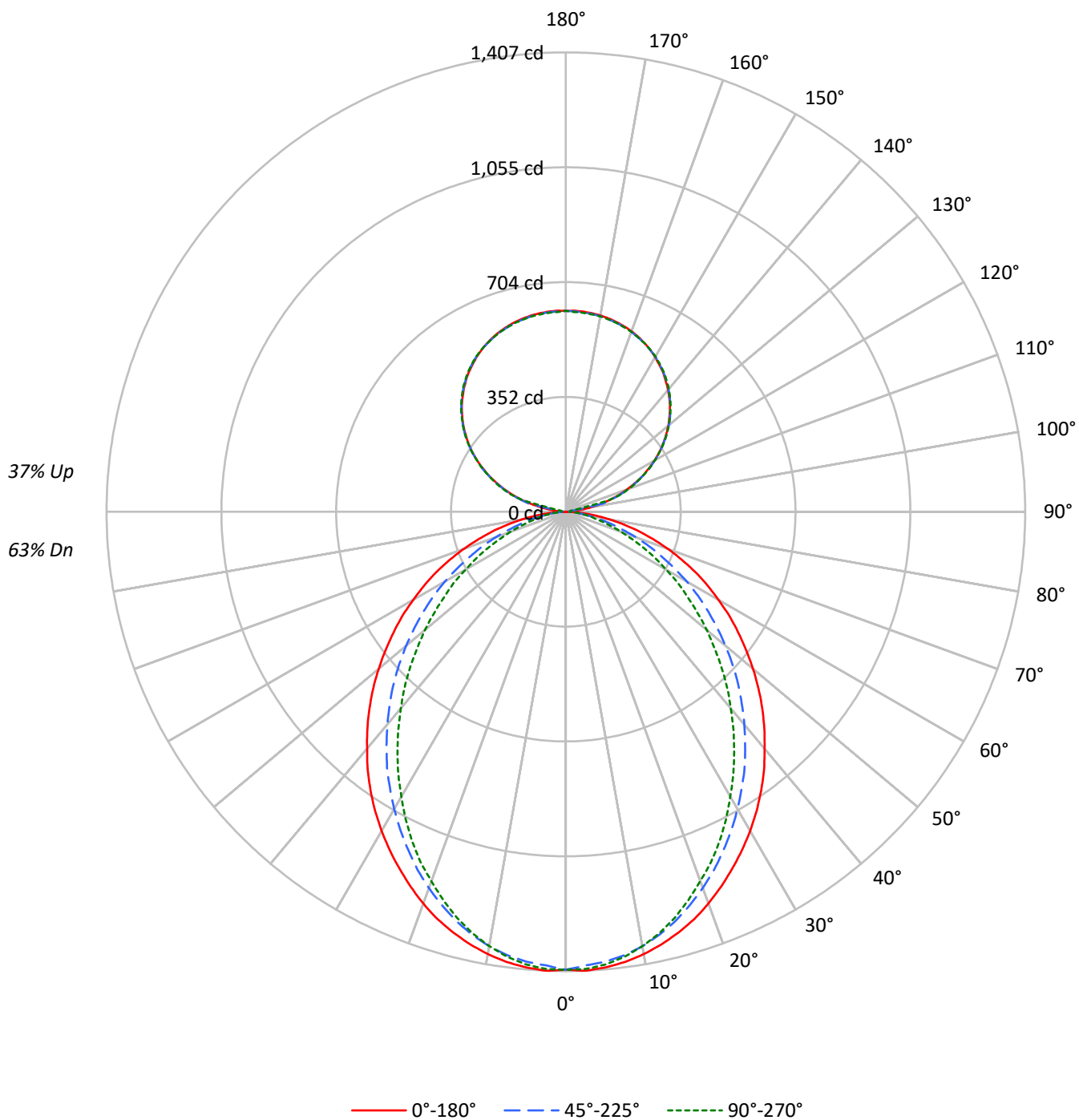
Lumens per Lamp: N/A
Luminaire Lumens: 5146.0 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 49.1
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	110	110	110	110	103	103	103	103	91	91	91	79	79	79	68	68	68
1	101	97	93	89	95	91	88	85	80	78	75	70	68	66	61	59	58
2	92	85	79	74	86	80	75	70	71	66	63	62	59	56	54	52	50
3	84	75	68	62	79	71	64	59	63	57	53	55	51	48	48	45	43
4	77	67	59	53	72	63	56	50	56	50	46	49	45	41	43	40	37
5	71	60	51	45	67	56	49	43	50	44	40	44	40	36	39	35	32
6	66	54	45	40	62	51	43	38	45	39	35	40	35	32	35	32	29
7	61	49	41	35	57	46	39	34	41	35	31	37	32	28	32	29	26
8	57	44	36	31	53	42	35	30	38	32	28	34	29	25	30	26	23
9	53	41	33	28	50	39	32	27	35	29	25	31	26	23	28	24	21
10	49	37	30	25	46	35	29	24	32	26	23	29	24	21	26	22	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11438	11438	11438
5°	11439	11098	11099
10°	11342	10748	10620
15°	11186	10312	10055
20°	10982	9815	9410
25°	10727	9279	8781
30°	10478	8732	8073
35°	10203	8177	7382
40°	9877	7579	6672
45°	9570	6987	5970
50°	9222	6341	5256
55°	8846	5677	4519
60°	8429	4974	3790
65°	8025	4166	3090
70°	7451	3316	2361
75°	6717	2412	1652
80°	5610	1481	1187
85°	4221	853	652

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9570 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	2.6
10°-20°	367.8	7.1
20°-30°	530.9	10.3
30°-40°	601.7	11.7
40°-50°	581.0	11.3
50°-60°	483.0	9.4
60°-70°	333.4	6.5
70°-80°	168.5	3.3
80°-90°	44.0	0.9
90°-100°	20.4	0.4
100°-110°	134.5	2.6
110°-120°	256.8	5.0
120°-130°	326.0	6.3
130°-140°	348.8	6.8
140°-150°	326.1	6.3
150°-160°	263.0	5.1
160°-170°	169.6	3.3
170°-180°	58.5	1.1
0°-30°	1030.6	20.0
0°-40°	1632.3	31.7
0°-60°	2696.4	52.4
0°-90°	3242.3	63.0
90°-120°	411.7	8.0
90°-150°	1412.7	27.5
90°-180°	1904.0	37.0
0°-180°	5146.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1403	1403	1403	1403	1403	
5°	1400	1396	1383	1394	1392	133
15°	1334	1324	1297	1295	1288	376
25°	1206	1187	1143	1124	1114	556
35°	1043	1008	955	918	899	652
45°	851	811	746	694	674	656
55°	644	601	532	476	455	576
65°	438	392	323	277	264	433
75°	233	193	143	118	112	246
85°	58	36	33	31	31	64
90°	1	6	10	13	14	5
95°	25	10	10	13	13	31
105°	138	141	144	148	131	145
115°	259	260	260	260	260	255
125°	364	365	364	366	366	325
135°	451	450	452	453	454	347
145°	520	521	521	522	523	325
155°	570	571	569	571	570	263
165°	601	599	599	603	599	170
175°	615	612	613	617	612	59
180°	615	615	615	615	615	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1402.7	1402.7	1402.7	1402.7	1402.7
2.5°	1407.0	1402.7	1390.8	1402.7	1401.6
5°	1400.5	1396.2	1383.3	1394.1	1391.9
7.5°	1390.8	1386.6	1370.4	1378.0	1374.7
10°	1375.8	1370.4	1351.1	1355.4	1351.1
12.5°	1356.5	1350.0	1326.4	1328.6	1322.1
15°	1333.9	1324.3	1297.4	1295.3	1287.7
17.5°	1308.1	1294.2	1263.0	1257.7	1246.9
20°	1277.0	1263.0	1226.5	1217.9	1204.0
22.5°	1242.6	1226.5	1186.8	1172.8	1162.1
25°	1206.1	1186.8	1142.8	1124.5	1113.8
27.5°	1168.5	1144.9	1098.7	1077.2	1062.2
30°	1128.8	1101.9	1051.5	1024.6	1007.4
32.5°	1086.9	1055.8	1003.1	970.9	954.8
35°	1042.9	1008.5	954.8	918.3	898.9
37.5°	996.7	961.2	902.2	862.4	843.1
40°	947.3	911.8	850.6	805.5	786.2
42.5°	900.0	862.4	798.0	751.8	731.4
45°	850.6	810.9	746.4	693.8	674.5
47.5°	800.1	759.3	692.7	638.0	616.5
50°	748.6	706.7	638.0	584.3	563.9
52.5°	696.0	655.1	584.3	529.5	508.0
55°	644.4	601.4	531.6	475.8	455.4
57.5°	593.9	548.8	480.1	423.2	408.1
60°	539.2	496.2	427.5	371.6	354.4
62.5°	489.8	444.6	373.8	323.3	310.4
65°	438.2	392.0	323.3	277.1	264.2
67.5°	384.5	340.5	276.0	235.2	220.2
70°	334.0	288.9	227.7	192.2	181.5
72.5°	280.3	240.6	183.7	154.7	145.0
75°	233.1	193.3	142.8	118.1	111.7
77.5°	183.7	149.3	106.3	89.1	87.0
80°	136.4	105.3	73.0	69.8	68.7
82.5°	95.6	67.7	52.6	50.5	49.4
85°	58.0	36.5	33.3	31.1	31.1
87.5°	24.7	16.1	15.0	14.0	15.0
90°	1.4	6.4	10.1	12.9	13.8
92.5°	6.9	6.0	9.7	12.4	12.4
95°	25.3	9.7	10.1	12.9	13.3
97.5°	48.3	58.4	10.1	12.4	12.9
100°	75.5	83.7	20.2	12.4	12.9
102.5°	105.8	111.4	116.9	13.3	13.3
105°	138.5	141.3	143.6	147.7	131.1
107.5°	168.4	169.8	173.0	175.3	177.2
110°	198.8	200.2	202.9	203.8	205.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	228.2	231.0	231.9	231.5	233.3
115°	258.6	260.0	259.5	260.4	260.4
117.5°	285.8	287.6	289.0	288.5	288.5
120°	313.4	315.2	314.7	315.7	314.7
122.5°	339.1	340.1	341.0	341.4	340.5
125°	363.5	365.4	364.4	365.8	366.3
127.5°	387.0	387.5	389.8	389.3	388.8
130°	409.5	410.0	411.4	411.8	411.8
132.5°	430.2	431.2	433.0	433.5	433.0
135°	451.0	450.5	452.3	453.3	454.2
137.5°	469.4	469.4	471.7	472.6	472.1
140°	487.3	488.2	489.1	490.5	491.0
142.5°	503.4	505.3	505.7	506.6	506.6
145°	520.0	521.4	521.4	521.8	522.7
147.5°	532.9	535.6	535.2	535.6	536.1
150°	547.1	549.0	548.5	548.5	549.0
152.5°	559.1	560.5	559.5	560.5	560.0
155°	570.1	570.6	569.2	571.1	569.7
157.5°	579.8	579.8	578.0	580.3	578.0
160°	588.1	586.7	586.2	589.0	586.2
162.5°	595.4	593.6	593.1	595.9	592.7
165°	601.4	599.1	599.1	602.8	598.7
167.5°	606.5	604.2	603.7	607.9	603.3
170°	610.6	607.9	608.3	612.0	607.4
172.5°	613.4	610.6	611.1	614.8	609.7
175°	615.2	612.5	612.9	617.1	611.5
177.5°	616.6	613.4	614.3	618.0	612.5
180°	615.2	615.2	615.2	615.2	615.2

(END OF REPORT)