

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: P1034308

Luminaire Tested: S124RDIW-B795D770UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034308
REPORT IS A COMBINATION OF REPORTS P1000910 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B795D770UB40-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

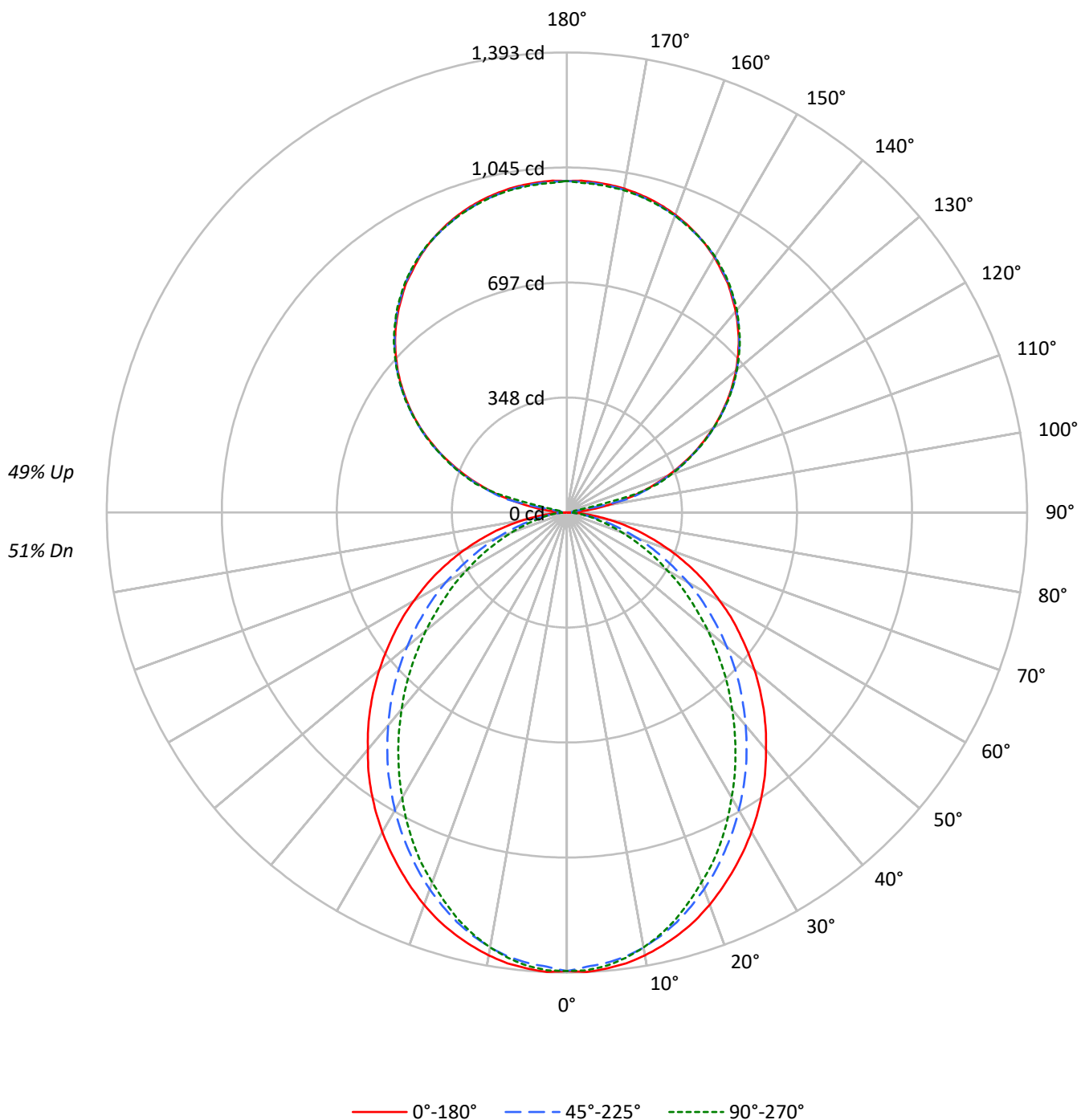
Lumens per Lamp: N/A
Luminaire Lumens: 6316.0 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 59.1
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	98	94	90	87	91	87	84	81	74	72	69	62	60	59	51	50	49
2	90	82	76	71	83	76	71	67	65	61	58	55	52	49	45	43	41
3	82	73	65	60	75	67	61	56	58	53	49	49	45	42	40	38	35
4	75	64	57	51	69	60	53	48	51	46	42	43	39	36	36	33	31
5	69	58	50	44	64	54	46	41	46	41	36	39	35	32	32	29	27
6	64	52	44	38	59	48	41	36	42	36	32	35	31	28	30	26	24
7	59	47	39	33	54	44	37	32	38	32	28	32	28	25	27	24	21
8	55	43	35	30	51	40	33	28	34	29	25	30	25	22	25	22	19
9	51	39	31	26	47	36	30	25	32	26	22	27	23	20	23	20	17
10	48	36	29	24	44	33	27	23	29	24	20	25	21	18	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11322	11322	11322
5°	11323	10985	10986
10°	11227	10639	10512
15°	11072	10207	9952
20°	10870	9715	9314
25°	10617	9184	8691
30°	10371	8643	7991
35°	10099	8094	7307
40°	9776	7503	6605
45°	9473	6916	5908
50°	9128	6276	5202
55°	8755	5619	4472
60°	8343	4923	3752
65°	7942	4123	3058
70°	7376	3282	2338
75°	6648	2388	1635
80°	5552	1466	1175
85°	4177	846	646

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9473 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.6	2.1
10°-20°	364.0	5.8
20°-30°	525.5	8.3
30°-40°	595.6	9.4
40°-50°	575.1	9.1
50°-60°	478.1	7.6
60°-70°	330.0	5.2
70°-80°	166.8	2.6
80°-90°	44.4	0.7
90°-100°	33.3	0.5
100°-110°	219.4	3.5
110°-120°	419.0	6.6
120°-130°	531.9	8.4
130°-140°	569.0	9.0
140°-150°	532.1	8.4
150°-160°	429.1	6.8
160°-170°	276.7	4.4
170°-180°	95.4	1.5
0°-30°	1020.1	16.2
0°-40°	1615.7	25.6
0°-60°	2668.9	42.3
0°-90°	3210.1	50.8
90°-120°	671.8	10.6
90°-150°	2304.8	36.5
90°-180°	3106.0	49.2
0°-180°	6316.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1388	1388	1388	1388	1388	
5°	1386	1382	1369	1380	1378	132
15°	1320	1311	1284	1282	1275	372
25°	1194	1175	1131	1113	1102	550
35°	1032	998	945	909	890	645
45°	842	803	739	687	668	649
55°	638	595	526	471	451	571
65°	434	388	320	274	262	428
75°	231	191	141	117	111	243
85°	57	36	33	31	31	63
90°	2	10	16	21	22	6
95°	41	16	16	21	22	51
105°	226	230	234	241	214	237
115°	422	424	423	425	425	415
125°	593	596	595	597	598	530
135°	736	735	738	740	741	567
145°	848	851	851	851	853	530
155°	930	931	929	932	929	429
165°	981	978	978	984	977	277
175°	1004	999	1000	1007	998	96
180°	1004	1004	1004	1004	1004	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1388.4	1388.4	1388.4	1388.4	1388.4
2.5°	1392.6	1388.4	1376.7	1388.4	1387.3
5°	1386.3	1382.0	1369.2	1379.9	1377.7
7.5°	1376.7	1372.4	1356.5	1363.9	1360.7
10°	1361.8	1356.5	1337.4	1341.6	1337.4
12.5°	1342.7	1336.3	1312.9	1315.0	1308.6
15°	1320.3	1310.8	1284.2	1282.1	1274.6
17.5°	1294.8	1281.0	1250.2	1244.9	1234.2
20°	1264.0	1250.2	1214.0	1205.5	1191.7
22.5°	1230.0	1214.0	1174.7	1160.9	1150.3
25°	1193.8	1174.7	1131.1	1113.0	1102.4
27.5°	1156.6	1133.2	1087.5	1066.3	1051.4
30°	1117.3	1090.7	1040.8	1014.2	997.2
32.5°	1075.8	1045.0	992.9	961.0	945.1
35°	1032.2	998.2	945.1	908.9	889.8
37.5°	986.5	951.5	893.0	853.7	834.5
40°	937.6	902.6	842.0	797.3	778.2
42.5°	890.9	853.7	789.9	744.2	724.0
45°	842.0	802.6	738.8	686.7	667.6
47.5°	792.0	751.6	685.7	631.5	610.2
50°	741.0	699.5	631.5	578.3	558.1
52.5°	688.9	648.5	578.3	524.1	502.8
55°	637.8	595.3	526.2	470.9	450.7
57.5°	587.9	543.2	475.2	418.9	404.0
60°	533.7	491.1	423.1	367.8	350.8
62.5°	484.8	440.1	370.0	320.0	307.2
65°	433.7	388.0	320.0	274.3	261.5
67.5°	380.6	337.0	273.2	232.8	217.9
70°	330.6	286.0	225.4	190.3	179.7
72.5°	277.5	238.1	181.8	153.1	143.5
75°	230.7	191.4	141.4	116.9	110.6
77.5°	181.8	147.8	105.2	88.2	86.1
80°	135.0	104.2	72.3	69.1	68.0
82.5°	94.6	67.0	52.1	50.0	48.9
85°	57.4	36.1	33.0	30.8	30.8
87.5°	24.5	15.9	14.9	13.8	14.9
90°	2.3	10.5	16.5	21.0	22.5
92.5°	11.3	9.8	15.8	20.3	20.3
95°	41.3	15.8	16.5	21.0	21.8
97.5°	78.8	95.3	16.5	20.3	21.0
100°	123.1	136.6	33.0	20.3	21.0
102.5°	172.7	181.7	190.7	21.8	21.8
105°	226.0	230.5	234.2	241.0	214.0
107.5°	274.8	277.0	282.3	286.0	289.0
110°	324.3	326.6	331.1	332.6	334.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	372.4	376.9	378.4	377.6	380.6
115°	421.9	424.2	423.4	424.9	424.9
117.5°	466.2	469.2	471.5	470.7	470.7
120°	511.3	514.3	513.5	515.0	513.5
122.5°	553.3	554.8	556.3	557.0	555.5
125°	593.1	596.1	594.6	596.8	597.6
127.5°	631.4	632.1	635.9	635.1	634.4
130°	668.2	668.9	671.2	671.9	671.9
132.5°	701.9	703.4	706.4	707.2	706.4
135°	735.7	735.0	738.0	739.5	741.0
137.5°	765.8	765.8	769.5	771.0	770.3
140°	795.0	796.5	798.0	800.3	801.0
142.5°	821.3	824.3	825.1	826.6	826.6
145°	848.3	850.6	850.6	851.3	852.8
147.5°	869.4	873.9	873.1	873.9	874.6
150°	892.6	895.6	894.9	894.9	895.6
152.5°	912.2	914.4	912.9	914.4	913.7
155°	930.2	930.9	928.7	931.7	929.4
157.5°	945.9	945.9	942.9	946.7	942.9
160°	959.4	957.2	956.4	960.9	956.4
162.5°	971.5	968.5	967.7	972.2	967.0
165°	981.2	977.5	977.5	983.5	976.7
167.5°	989.5	985.7	985.0	991.7	984.2
170°	996.2	991.7	992.5	998.5	991.0
172.5°	1000.7	996.2	997.0	1003.0	994.7
175°	1003.7	999.2	1000.0	1006.7	997.7
177.5°	1006.0	1000.7	1002.2	1008.2	999.2
180°	1003.7	1003.7	1003.7	1003.7	1003.7

(END OF REPORT)