

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: P1033822

Luminaire Tested: S124DIW-B795D770UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033822
REPORT IS A COMBINATION OF REPORTS P998266 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D770UB50-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

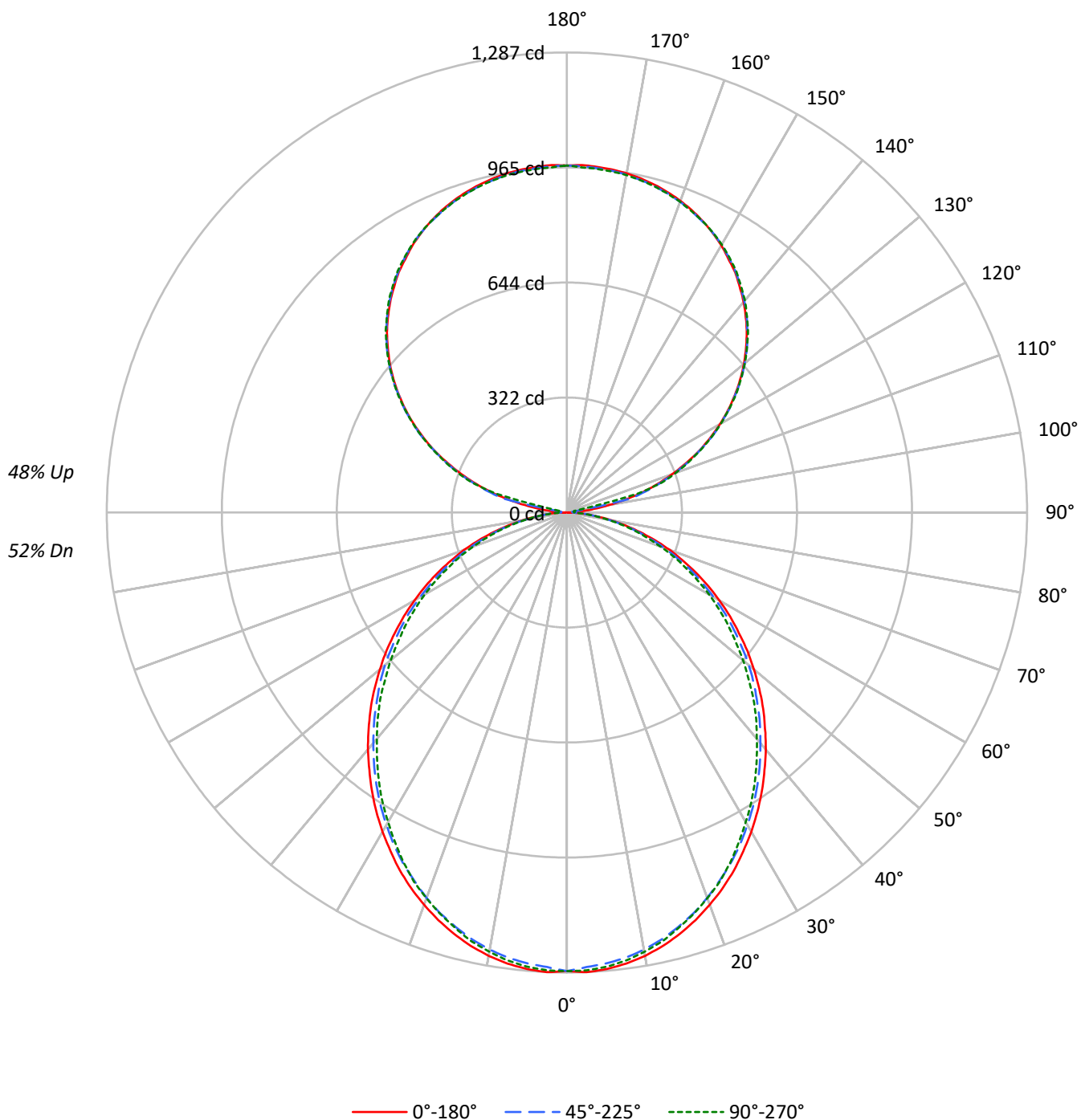
Lumens per Lamp: N/A
Luminaire Lumens: 6299.0 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58
1	98	94	90	86	91	87	84	81	74	72	69	62	61	59	51	50	49
2	89	82	76	71	83	76	71	66	65	61	57	55	52	49	45	43	41
3	82	72	65	59	75	67	60	55	57	52	48	48	45	42	40	37	35
4	75	64	56	50	69	59	52	47	51	45	41	43	39	36	36	33	30
5	69	57	49	43	63	53	46	40	46	40	36	39	34	31	32	29	26
6	63	51	43	37	58	48	40	35	41	35	31	35	31	27	29	26	23
7	58	46	38	32	54	43	36	31	37	32	27	32	27	24	27	23	21
8	54	42	34	29	50	39	32	27	34	28	24	29	25	21	25	21	19
9	50	38	31	26	47	36	29	24	31	26	22	27	22	19	23	19	17
10	47	35	28	23	44	33	26	22	29	23	20	25	20	17	21	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10462	10462	10462
5°	10470	10161	10174
10°	10382	9879	9810
15°	10233	9543	9399
20°	10043	9181	8975
25°	9829	8797	8518
30°	9571	8383	8016
35°	9303	7958	7531
40°	9025	7503	7014
45°	8733	7044	6532
50°	8409	6600	5998
55°	8058	6082	5467
60°	7697	5514	4915
65°	7285	4927	4292
70°	6811	4222	3625
75°	6104	3403	2904
80°	5199	2460	2042
85°	4039	1371	1098

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8733 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.9	1.9
10°-20°	340.7	5.4
20°-30°	501.4	8.0
30°-40°	582.8	9.3
40°-50°	582.8	9.3
50°-60°	509.7	8.1
60°-70°	378.4	6.0
70°-80°	214.7	3.4
80°-90°	63.5	1.0
90°-100°	32.2	0.5
100°-110°	212.2	3.4
110°-120°	405.3	6.4
120°-130°	514.5	8.2
130°-140°	550.4	8.7
140°-150°	514.6	8.2
150°-160°	415.0	6.6
160°-170°	267.6	4.2
170°-180°	92.2	1.5
0°-30°	963.0	15.3
0°-40°	1545.9	24.5
0°-60°	2638.4	41.9
0°-90°	3295.0	52.3
90°-120°	649.7	10.3
90°-150°	2229.1	35.4
90°-180°	3004.0	47.7
0°-180°	6299.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1282	1278	1266	1278	1276	122
15°	1220	1216	1201	1207	1204	344
25°	1105	1098	1084	1085	1080	509
35°	951	944	929	922	917	595
45°	776	769	752	741	738	598
55°	587	584	570	557	551	526
65°	398	393	382	372	367	394
75°	212	207	202	197	196	225
85°	56	56	54	54	52	60
90°	2	10	16	20	22	6
95°	40	15	16	20	21	49
105°	219	223	226	233	207	229
115°	408	410	410	411	411	402
125°	574	576	575	577	578	512
135°	712	711	714	715	717	548
145°	820	823	823	823	825	513
155°	900	900	898	901	899	415
165°	949	945	945	951	945	268
175°	971	966	967	974	965	92
180°	971	971	971	971	971	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1283.0	1283.0	1283.0	1283.0	1283.0
2.5°	1287.1	1284.0	1272.7	1283.0	1281.9
5°	1281.9	1277.8	1266.5	1277.8	1275.8
7.5°	1272.7	1268.6	1256.2	1265.5	1264.5
10°	1259.3	1255.2	1241.9	1250.1	1248.0
12.5°	1241.9	1237.7	1223.3	1232.6	1229.5
15°	1220.3	1216.2	1200.7	1206.9	1203.8
17.5°	1195.6	1190.5	1176.1	1180.2	1178.1
20°	1167.8	1162.7	1147.3	1150.4	1148.3
22.5°	1138.0	1130.8	1115.4	1121.6	1117.5
25°	1105.1	1097.9	1083.5	1084.6	1080.5
27.5°	1068.1	1060.9	1047.6	1045.5	1040.4
30°	1031.1	1022.9	1009.5	1005.4	1000.3
32.5°	992.0	984.8	970.5	965.3	960.2
35°	950.9	943.7	929.3	922.1	917.0
37.5°	907.7	901.6	886.2	879.0	871.8
40°	865.6	857.4	842.0	831.7	826.5
42.5°	820.4	816.3	798.8	786.4	783.4
45°	776.2	769.0	752.5	741.2	738.1
47.5°	729.9	724.8	709.3	697.0	688.8
50°	682.6	678.5	664.1	649.7	643.5
52.5°	636.3	631.2	615.8	603.4	595.2
55°	587.0	583.9	569.5	557.2	551.0
57.5°	540.7	537.7	523.3	510.9	504.8
60°	492.4	487.3	473.9	464.7	459.5
62.5°	445.1	441.0	426.6	418.4	413.3
65°	397.8	392.7	382.4	372.1	367.0
67.5°	349.5	345.4	335.1	324.9	323.8
70°	305.3	298.1	289.9	281.7	278.6
72.5°	258.0	250.8	244.7	238.5	235.4
75°	211.8	206.6	201.5	197.4	196.4
77.5°	166.5	164.5	159.3	158.3	155.2
80°	126.4	123.4	121.3	119.3	118.2
82.5°	87.4	86.4	86.4	85.3	84.3
85°	55.5	55.5	53.5	53.5	52.4
87.5°	26.7	25.7	24.7	24.7	24.7
90°	2.2	10.2	16.0	20.3	21.8
92.5°	10.9	9.4	15.2	19.6	19.6
95°	39.9	15.2	16.0	20.3	21.1
97.5°	76.2	92.2	16.0	19.6	20.3
100°	119.1	132.2	31.9	19.6	20.3
102.5°	167.0	175.7	184.4	21.1	21.1
105°	218.6	222.9	226.5	233.1	206.9
107.5°	265.8	267.9	273.0	276.6	279.5
110°	313.7	315.9	320.2	321.7	323.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	360.1	364.5	366.0	365.2	368.1
115°	408.1	410.2	409.5	411.0	411.0
117.5°	450.9	453.8	456.0	455.3	455.3
120°	494.5	497.4	496.7	498.1	496.7
122.5°	535.1	536.6	538.0	538.8	537.3
125°	573.6	576.5	575.1	577.3	578.0
127.5°	610.7	611.4	615.0	614.3	613.6
130°	646.2	647.0	649.1	649.9	649.9
132.5°	678.9	680.4	683.3	684.0	683.3
135°	711.6	710.9	713.8	715.2	716.7
137.5°	740.6	740.6	744.3	745.7	745.0
140°	768.9	770.4	771.8	774.0	774.8
142.5°	794.4	797.3	798.0	799.4	799.4
145°	820.5	822.7	822.7	823.4	824.9
147.5°	840.8	845.2	844.5	845.2	845.9
150°	863.3	866.2	865.5	865.5	866.2
152.5°	882.2	884.4	882.9	884.4	883.7
155°	899.6	900.4	898.2	901.1	898.9
157.5°	914.9	914.9	912.0	915.6	912.0
160°	928.0	925.8	925.1	929.4	925.1
162.5°	939.6	936.7	935.9	940.3	935.2
165°	949.0	945.4	945.4	951.2	944.7
167.5°	957.0	953.4	952.6	959.2	951.9
170°	963.5	959.2	959.9	965.7	958.5
172.5°	967.9	963.5	964.3	970.1	962.1
175°	970.8	966.4	967.2	973.7	965.0
177.5°	973.0	967.9	969.3	975.2	966.4
180°	970.8	970.8	970.8	970.8	970.8

(END OF REPORT)