

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: P1033823

Luminaire Tested: S124DIW-B795D770UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033823
REPORT IS A COMBINATION OF REPORTS P998267 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-F1
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

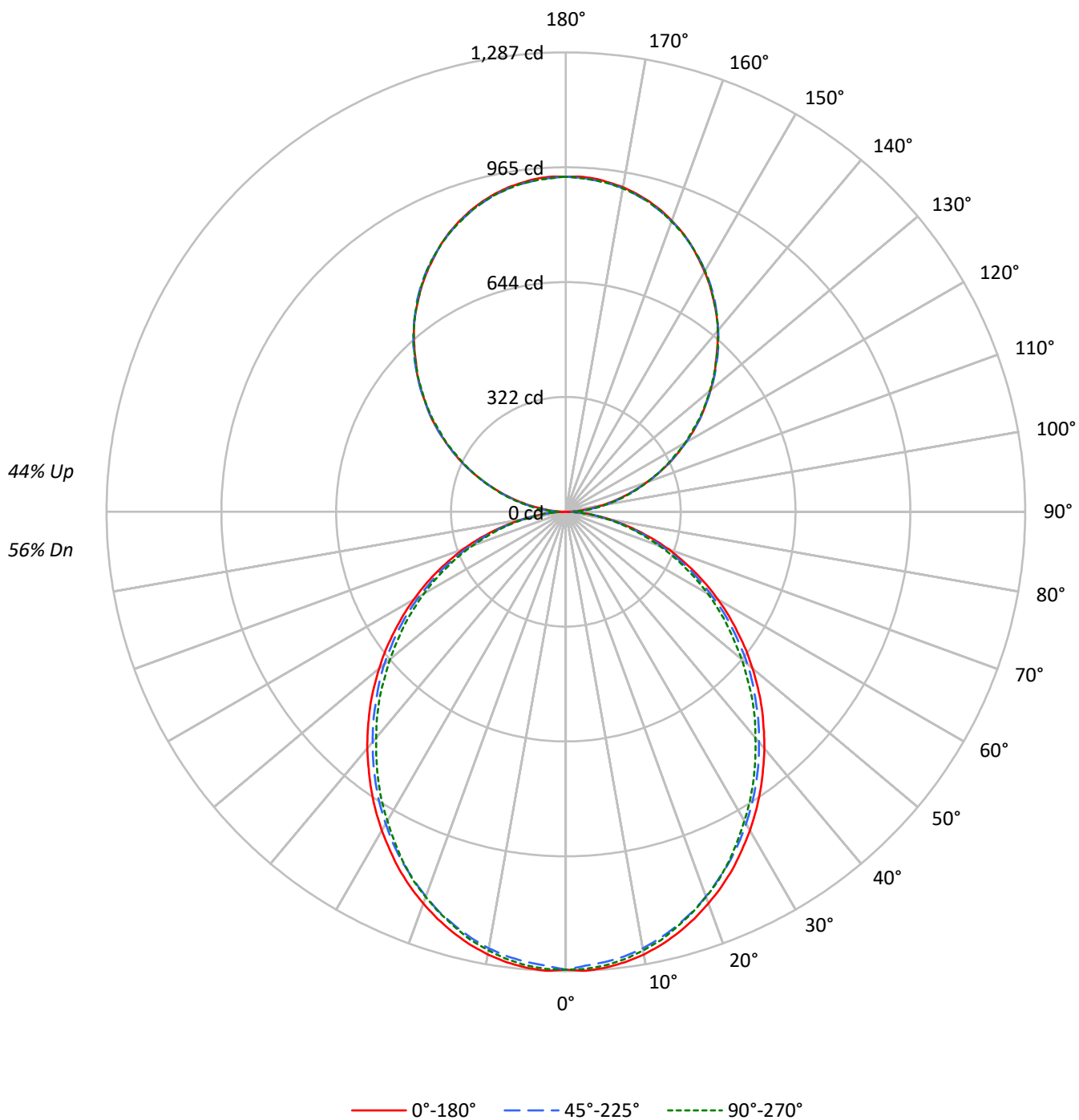
Lumens per Lamp: N/A
Luminaire Lumens: 5899.0 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52
2	90	83	76	71	84	77	72	67	67	62	59	57	54	51	48	46	44
3	82	73	65	59	76	68	61	56	59	54	49	50	46	43	42	40	37
4	75	64	56	50	70	60	53	48	52	47	42	45	40	37	38	35	32
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28
6	64	51	43	37	59	48	41	36	42	36	32	36	32	28	31	27	25
7	59	47	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22
8	55	42	34	29	51	40	33	28	35	29	25	30	26	22	26	22	20
9	51	39	31	26	47	36	29	25	32	26	22	28	23	20	24	20	18
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16

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	2.0
10°-20°	340.7	5.8
20°-30°	501.4	8.5
30°-40°	582.8	9.9
40°-50°	582.8	9.9
50°-60°	509.7	8.6
60°-70°	378.4	6.4
70°-80°	214.7	3.6
80°-90°	63.5	1.1
90°-100°	61.2	1.0
100°-110°	183.2	3.1
110°-120°	311.3	5.3
120°-130°	410.5	7.0
130°-140°	461.1	7.8
140°-150°	453.2	7.7
150°-160°	381.1	6.5
160°-170°	253.6	4.3
170°-180°	88.8	1.5
0°-30°	963.0	16.3
0°-40°	1545.9	26.2
0°-60°	2638.4	44.7
0°-90°	3295.0	55.9
90°-120°	555.7	9.4
90°-150°	1880.4	31.9
90°-180°	2604.0	44.1
0°-180°	5899.0	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	7
95°	44	50	55	57	57	47
105°	169	170	173	175	177	179
115°	316	316	315	314	314	312
125°	461	461	460	459	457	411
135°	594	599	599	597	595	460
145°	722	725	726	725	723	452
155°	827	827	827	830	827	381
165°	901	899	897	902	899	254
175°	937	933	933	938	933	89
180°	938	938	938	938	938	

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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°	18.9	28.3	31.9	34.1	34.8
95°	43.5	50.1	55.2	57.3	57.3
97.5°	69.7	75.5	81.3	84.2	84.2
100°	101.6	104.5	111.1	112.5	112.5
102.5°	135.0	135.7	141.5	143.7	144.4
105°	169.1	169.8	172.7	174.9	177.1
107.5°	204.7	205.4	206.1	209.0	208.3
110°	241.0	242.4	241.7	240.3	242.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	278.7	278.7	277.3	277.3	277.3
115°	316.5	316.5	315.0	314.3	313.6
117.5°	352.0	352.0	351.3	349.1	346.9
120°	387.6	390.5	388.3	384.7	386.1
122.5°	424.6	425.3	424.6	422.4	418.8
125°	460.9	460.9	460.2	458.7	457.3
127.5°	493.6	495.7	494.3	492.8	492.1
130°	528.4	530.6	530.6	529.1	526.2
132.5°	564.0	565.4	564.7	563.2	562.5
135°	594.5	598.8	598.8	597.4	595.2
137.5°	628.6	630.7	632.2	630.0	630.7
140°	662.7	664.1	664.1	663.4	662.7
142.5°	693.9	695.3	694.6	694.6	694.6
145°	722.2	725.1	725.8	725.1	722.9
147.5°	751.2	754.9	754.1	753.4	752.7
150°	777.4	780.3	780.3	780.3	779.5
152.5°	802.0	803.5	804.2	806.4	804.2
155°	827.4	827.4	826.7	829.6	826.7
157.5°	849.2	847.8	847.8	849.9	847.8
160°	868.1	867.4	866.6	868.8	865.2
162.5°	885.5	883.3	882.6	887.0	883.3
165°	900.8	898.6	897.1	901.5	898.6
167.5°	913.1	910.2	910.2	914.5	910.2
170°	923.3	919.6	920.4	924.7	919.6
172.5°	930.5	927.6	927.6	932.7	927.6
175°	937.0	933.4	932.7	937.8	932.7
177.5°	940.0	936.3	936.3	941.4	935.6
180°	938.5	938.5	938.5	938.5	938.5

(END OF REPORT)