

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: P1033325

Luminaire Tested: S124DIW-B1195D470UB27-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033325
REPORT IS A COMBINATION OF REPORTS P997150 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D470UB27-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

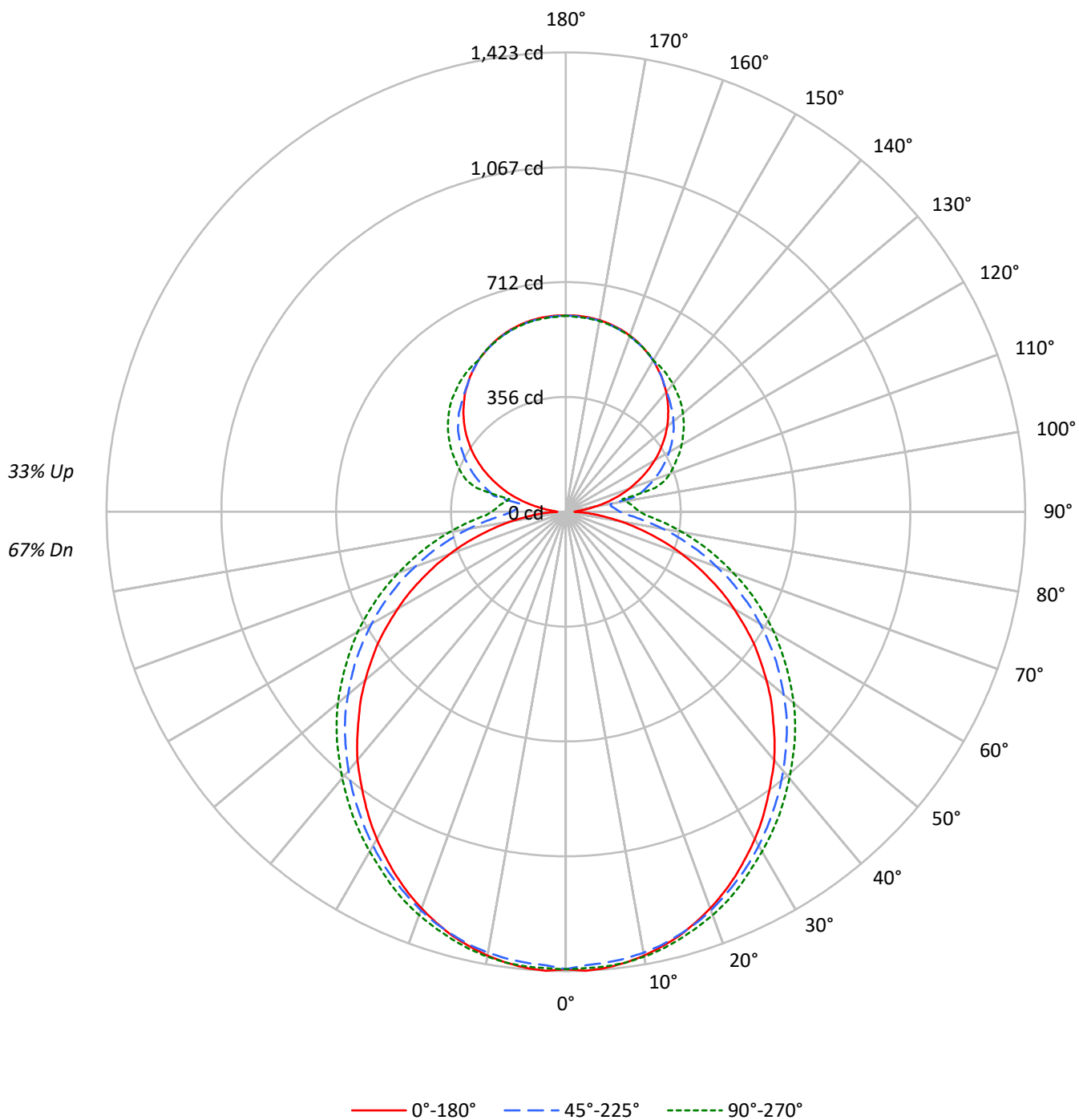
Lumens per Lamp: N/A
Luminaire Lumens: 6712.0 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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	111	111	111	111	105	105	105	105	93	93	93	81	81	81	71	71	71
1	100	95	91	87	94	90	86	82	79	76	73	70	67	65	61	59	58
2	91	82	75	70	85	78	71	66	69	64	60	60	57	53	53	50	47
3	82	72	64	57	77	68	61	55	60	54	50	53	48	45	46	43	40
4	75	63	55	48	70	60	52	46	53	47	42	47	42	38	41	37	34
5	69	56	48	41	64	53	45	39	47	41	36	42	37	33	37	33	29
6	63	51	42	36	59	48	40	34	43	36	31	38	33	28	33	29	26
7	59	46	37	31	55	43	35	30	39	32	27	34	29	25	30	26	23
8	54	41	33	28	51	39	32	26	35	29	24	31	26	22	28	24	20
9	51	38	30	25	48	36	29	24	32	26	22	29	24	20	26	21	18
10	47	35	27	22	45	33	26	21	30	24	20	27	22	18	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11555	11555	11555
5°	11586	11254	11274
10°	11511	11032	11000
15°	11403	10783	10692
20°	11244	10513	10393
25°	11064	10216	10070
30°	10869	9922	9740
35°	10649	9621	9447
40°	10472	9331	9144
45°	10211	9060	8875
50°	9988	8752	8592
55°	9758	8456	8266
60°	9401	8086	7959
65°	9008	7688	7590
70°	8531	7233	7163
75°	7864	6726	6757
80°	7115	6210	6331
85°	6120	5691	5986

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10211 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.3	2.0
10°-20°	384.7	5.7
20°-30°	581.6	8.7
30°-40°	703.7	10.5
40°-50°	743.9	11.1
50°-60°	700.1	10.4
60°-70°	581.0	8.7
70°-80°	407.7	6.1
80°-90°	231.1	3.4
90°-100°	157.0	2.3
100°-110°	234.1	3.5
110°-120°	321.6	4.8
120°-130°	360.2	5.4
130°-140°	360.9	5.4
140°-150°	325.3	4.8
150°-160°	259.7	3.9
160°-170°	167.5	2.5
170°-180°	57.7	0.9
0°-30°	1100.6	16.4
0°-40°	1804.2	26.9
0°-60°	3248.2	48.4
0°-90°	4467.9	66.6
90°-120°	712.7	10.6
90°-150°	1759.2	26.2
90°-180°	2244.0	33.4
0°-180°	6712.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1417	1417	1417	1417	1417	
5°	1418	1414	1403	1415	1414	135
15°	1360	1361	1357	1371	1369	383
25°	1244	1254	1258	1276	1277	573
35°	1088	1108	1123	1146	1150	682
45°	908	938	968	995	1003	701
55°	711	744	792	824	833	633
65°	492	543	597	636	649	488
75°	273	332	398	443	457	290
85°	84	151	222	270	286	88
90°	27	95	167	216	229	19
95°	46	82	148	194	208	47
105°	151	186	246	290	287	159
115°	265	280	331	367	378	261
125°	365	366	404	436	446	327
135°	448	448	461	487	498	346
145°	515	515	515	525	532	322
155°	563	563	562	564	562	260
165°	594	592	592	595	591	168
175°	608	605	605	609	604	58
180°	608	608	608	608	608	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1417.0	1417.0	1417.0	1417.0	1417.0
2.5°	1423.3	1418.5	1405.9	1417.0	1415.4
5°	1418.5	1413.8	1402.7	1415.4	1413.8
7.5°	1409.0	1405.9	1396.3	1410.6	1409.0
10°	1396.3	1394.7	1386.8	1401.1	1399.5
12.5°	1378.9	1378.9	1374.1	1386.8	1386.8
15°	1359.8	1361.4	1356.7	1370.9	1369.4
17.5°	1334.5	1339.2	1337.6	1351.9	1350.3
20°	1307.5	1312.2	1313.8	1329.7	1329.7
22.5°	1277.3	1283.7	1286.8	1302.7	1305.9
25°	1244.0	1253.5	1258.3	1275.7	1277.3
27.5°	1207.5	1221.8	1228.1	1244.0	1245.6
30°	1171.0	1183.7	1194.8	1212.3	1215.4
32.5°	1131.3	1147.2	1159.9	1180.5	1183.7
35°	1088.5	1107.5	1123.4	1145.6	1150.4
37.5°	1045.7	1067.9	1086.9	1109.1	1113.9
40°	1004.4	1025.0	1047.2	1071.1	1077.4
42.5°	956.8	980.6	1007.6	1034.6	1039.3
45°	907.6	937.8	967.9	994.9	1002.8
47.5°	861.6	891.7	926.7	953.6	963.2
50°	810.8	845.7	880.6	912.4	921.9
52.5°	760.0	795.0	836.2	867.9	877.5
55°	710.9	744.2	791.8	823.5	833.0
57.5°	655.3	696.6	742.6	780.7	788.6
60°	601.4	642.6	695.0	731.5	744.2
62.5°	549.0	595.0	647.4	683.9	696.6
65°	491.9	542.7	596.6	636.3	649.0
67.5°	437.9	491.9	549.0	588.7	601.4
70°	382.4	436.4	496.7	539.5	550.6
72.5°	328.5	384.0	449.0	490.3	503.0
75°	272.9	331.6	398.3	442.7	457.0
77.5°	220.6	282.4	352.3	396.7	412.6
80°	173.0	236.4	306.2	353.8	366.5
82.5°	125.4	192.0	261.8	311.0	325.3
85°	84.1	150.7	222.1	269.7	285.6
87.5°	52.4	117.4	187.2	233.3	247.5
90°	26.8	95.3	167.1	215.8	229.4
92.5°	30.6	85.2	157.1	204.3	217.0
95°	45.6	82.5	148.0	193.6	208.4
97.5°	66.7	122.8	140.1	183.7	198.3
100°	92.0	141.4	140.6	175.7	187.2
102.5°	122.0	162.4	228.1	167.1	179.8
105°	151.1	185.5	246.5	290.2	286.6
107.5°	180.6	209.0	267.6	309.6	322.5
110°	209.0	232.5	290.8	328.2	342.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	236.5	258.2	311.5	345.9	360.5
115°	264.8	280.5	330.9	366.7	377.8
117.5°	291.7	303.0	351.9	384.9	397.6
120°	317.3	323.9	369.5	402.1	413.9
122.5°	342.8	343.7	387.5	419.6	429.8
125°	365.2	365.6	404.3	435.8	445.8
127.5°	388.4	387.4	421.3	449.5	460.1
130°	409.2	408.0	434.8	463.8	473.3
132.5°	429.6	428.9	449.8	477.2	486.3
135°	448.5	448.0	460.9	487.2	497.7
137.5°	466.6	465.0	473.6	498.3	505.9
140°	484.4	483.7	486.2	508.1	516.5
142.5°	498.7	500.5	499.3	517.7	524.0
145°	515.0	514.8	514.8	524.7	532.1
147.5°	527.7	528.9	528.4	530.5	537.2
150°	541.8	542.0	541.6	541.6	542.0
152.5°	552.0	553.4	552.5	553.4	553.0
155°	562.9	563.4	562.0	563.9	562.5
157.5°	572.5	572.5	570.7	572.9	570.7
160°	580.7	579.3	578.9	581.6	578.9
162.5°	587.9	586.1	585.7	588.4	585.2
165°	593.8	591.6	591.6	595.2	591.1
167.5°	598.8	596.6	596.1	600.2	595.7
170°	602.9	600.2	600.7	604.3	599.8
172.5°	605.7	602.9	603.4	607.0	602.0
175°	607.5	604.8	605.2	609.3	603.8
177.5°	608.8	605.7	606.6	610.2	604.8
180°	607.5	607.5	607.5	607.5	607.5

(END OF REPORT)