

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: P1033326

Luminaire Tested: S124DIW-B1195D470UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033326
REPORT IS A COMBINATION OF REPORTS P997151 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-D1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

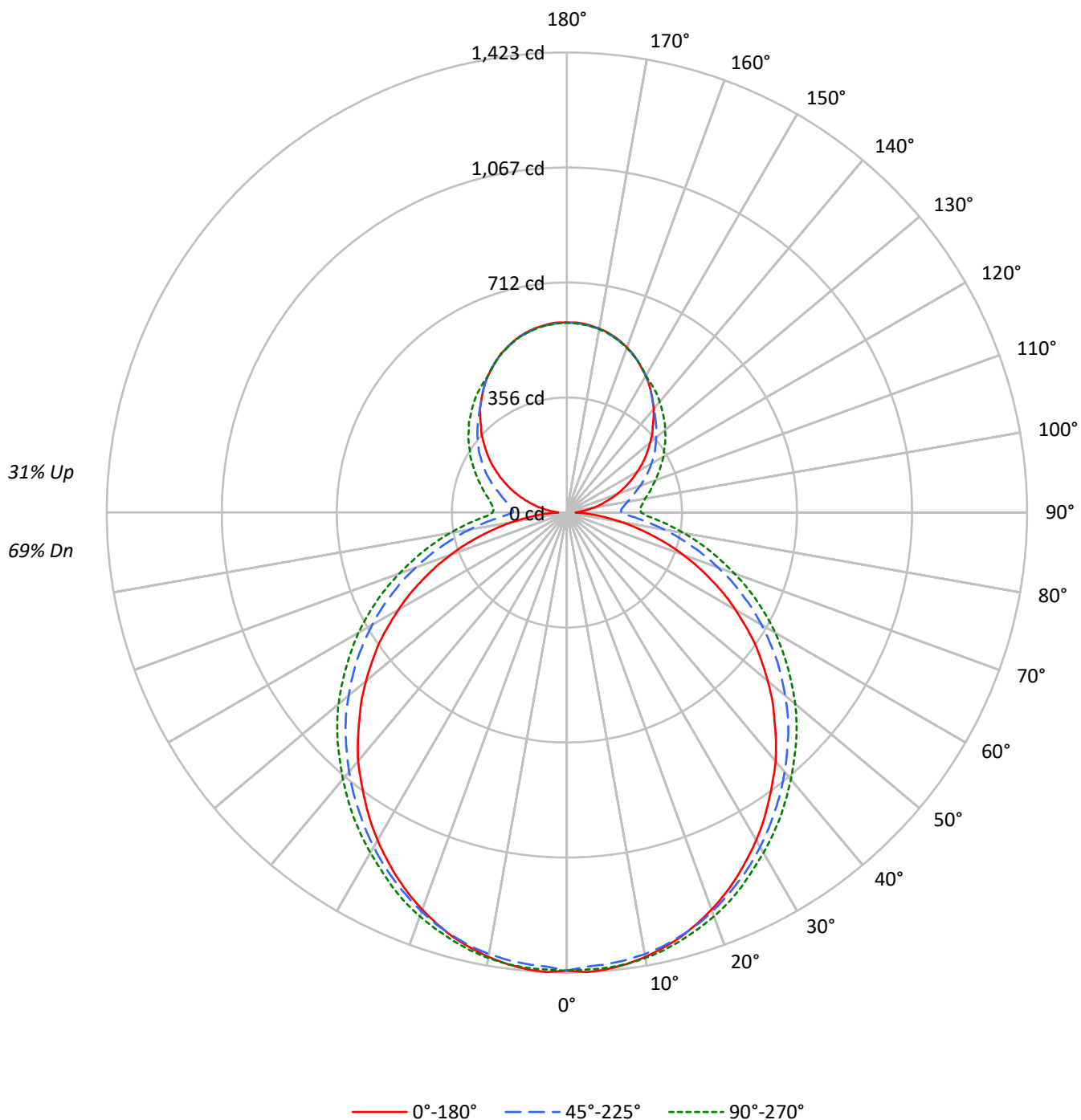
Lumens per Lamp: N/A
Luminaire Lumens: 6462.0 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	112	112	112	112	106	106	106	106	94	94	94	83	83	83	74	74	74
1	101	96	91	87	95	90	86	83	80	77	74	71	69	67	63	61	60
2	91	83	76	70	86	78	72	67	70	65	61	62	58	55	55	52	49
3	83	72	64	58	78	68	61	55	61	55	50	54	50	46	48	44	41
4	76	64	55	48	71	60	52	46	54	48	42	48	43	39	43	38	35
5	69	57	48	41	65	54	46	40	48	42	36	43	38	33	38	34	30
6	64	51	42	36	60	48	40	34	43	37	32	39	33	29	35	30	26
7	59	46	37	31	55	44	36	30	39	33	28	35	30	26	31	27	23
8	55	42	33	28	52	40	32	27	36	29	25	32	27	23	29	24	21
9	51	38	30	25	48	36	29	24	33	27	22	30	24	20	27	22	19
10	48	35	27	22	45	33	26	21	30	24	20	27	22	19	25	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	2.1
10°-20°	384.7	6.0
20°-30°	581.6	9.0
30°-40°	703.7	10.9
40°-50°	743.9	11.5
50°-60°	700.1	10.8
60°-70°	581.0	9.0
70°-80°	407.7	6.3
80°-90°	231.1	3.6
90°-100°	175.1	2.7
100°-110°	216.0	3.3
110°-120°	262.8	4.1
120°-130°	295.2	4.6
130°-140°	305.1	4.7
140°-150°	286.9	4.4
150°-160°	238.6	3.7
160°-170°	158.7	2.5
170°-180°	55.6	0.9
0°-30°	1100.6	17.0
0°-40°	1804.2	27.9
0°-60°	3248.2	50.3
0°-90°	4467.9	69.1
90°-120°	653.9	10.1
90°-150°	1541.2	23.9
90°-180°	1994.0	30.9
0°-180°	6462.0	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°	48	104	172	217	231	46
105°	120	152	213	254	268	128
115°	208	222	272	306	317	205
125°	295	293	332	362	370	263
135°	375	378	389	414	422	291
145°	454	454	454	463	468	284
155°	518	518	517	519	517	238
165°	564	562	562	564	562	159
175°	586	584	584	587	584	56
180°	587	587	587	587	587	

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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°	35.6	97.0	167.6	213.4	226.5
95°	47.9	104.3	172.5	216.8	231.1
97.5°	62.6	112.3	181.0	224.1	238.3
100°	81.1	124.1	190.1	233.8	244.9
102.5°	102.0	137.3	201.3	243.8	257.0
105°	120.1	152.3	212.8	253.9	267.9
107.5°	142.4	169.9	225.8	267.3	278.0
110°	163.5	186.6	241.7	277.3	291.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	185.5	204.5	256.0	290.9	303.6
115°	207.6	221.9	271.8	306.2	316.8
117.5°	229.8	239.3	286.5	318.5	329.8
120°	250.5	257.1	301.7	331.2	344.8
122.5°	273.6	274.1	316.5	346.9	355.7
125°	294.8	293.3	332.4	361.7	370.3
127.5°	315.2	315.1	345.9	373.6	384.2
130°	335.5	335.3	360.7	388.3	395.9
132.5°	357.8	357.1	375.6	401.7	410.8
135°	375.2	378.0	389.1	413.6	421.7
137.5°	396.6	396.4	403.6	426.0	434.5
140°	417.9	417.3	418.9	439.0	446.4
142.5°	435.9	436.8	434.7	452.2	458.5
145°	453.6	453.8	454.3	463.3	468.4
147.5°	471.8	472.4	472.0	473.1	479.0
150°	488.1	488.3	488.3	488.3	487.9
152.5°	502.0	502.9	503.3	504.7	503.3
155°	517.9	517.9	517.4	519.2	517.4
157.5°	531.5	530.6	530.6	532.0	530.6
160°	543.3	542.9	542.4	543.8	541.5
162.5°	554.2	552.8	552.4	555.1	552.8
165°	563.8	562.4	561.5	564.2	562.4
167.5°	571.5	569.7	569.7	572.4	569.7
170°	577.8	575.6	576.0	578.7	575.6
172.5°	582.4	580.6	580.6	583.7	580.6
175°	586.5	584.2	583.7	586.9	583.7
177.5°	588.3	586.0	586.0	589.2	585.6
180°	587.4	587.4	587.4	587.4	587.4

(END OF REPORT)