

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: P1033733

Luminaire Tested: S124DIW-B795D1340UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033733
REPORT IS A COMBINATION OF REPORTS P998065 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1340UB50-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

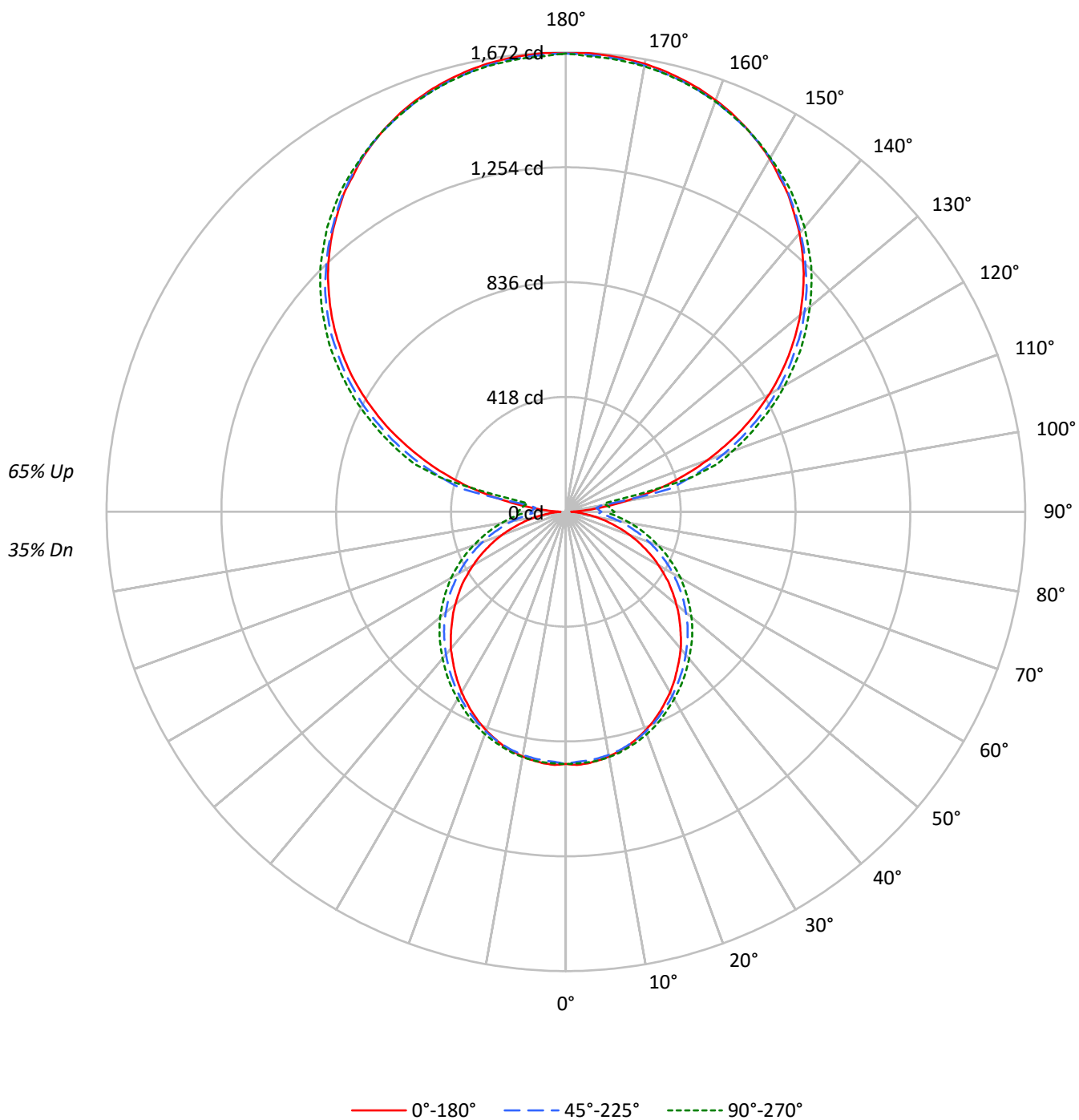
Lumens per Lamp: N/A
Luminaire Lumens: 8295.0 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 78
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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	28	28	28
1	94	89	85	81	84	81	77	74	65	62	60	50	48	47	36	35	34	23	22	21
2	85	77	71	66	76	70	65	60	56	52	49	43	41	38	31	30	28	19	18	17
3	77	68	60	54	69	61	55	50	49	45	41	38	35	32	28	25	24	16	15	14
4	71	60	52	46	63	54	47	42	43	38	34	34	30	27	24	22	20	12	11	10
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	9	8	7
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	6	5	4
7	55	43	35	29	49	39	32	27	31	26	22	24	21	18	18	15	13	3	2	1
8	51	38	31	26	46	35	28	24	28	23	20	22	19	16	17	14	12			
9	47	35	28	23	42	32	25	21	26	21	17	20	17	14	15	13	11			
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	12	10			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7486	7486	7486
5°	7507	7291	7304
10°	7458	7147	7127
15°	7388	6986	6927
20°	7285	6812	6733
25°	7168	6619	6524
30°	7042	6428	6311
35°	6899	6234	6121
40°	6785	6046	5924
45°	6616	5870	5750
50°	6471	5671	5567
55°	6323	5478	5355
60°	6090	5239	5157
65°	5836	4980	4918
70°	5528	4686	4641
75°	5095	4357	4378
80°	4611	4024	4103
85°	3966	3687	3878

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6616 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.0	1.0
10°-20°	249.2	3.0
20°-30°	376.8	4.5
30°-40°	455.9	5.5
40°-50°	482.0	5.8
50°-60°	453.6	5.5
60°-70°	376.4	4.5
70°-80°	264.1	3.2
80°-90°	152.4	1.8
90°-100°	144.0	1.7
100°-110°	430.3	5.2
110°-120°	740.4	8.9
120°-130°	908.8	11.0
130°-140°	956.4	11.5
140°-150°	886.4	10.7
150°-160°	713.1	8.6
160°-170°	459.9	5.5
170°-180°	158.5	1.9
0°-30°	713.1	8.6
0°-40°	1169.0	14.1
0°-60°	2104.5	25.4
0°-90°	2897.4	34.9
90°-120°	1314.7	15.8
90°-150°	4066.1	49.0
90°-180°	5398.0	65.1
0°-180°	8295.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	918	918	918	918	918	
5°	919	916	909	917	916	87
15°	881	882	879	888	887	248
25°	806	812	815	827	828	371
35°	705	718	728	742	745	442
45°	588	608	627	645	650	454
55°	461	482	513	534	540	410
65°	319	352	386	412	420	316
75°	177	215	258	287	296	188
85°	54	98	144	175	185	57
90°	20	75	129	166	177	15
95°	82	74	117	152	163	95
105°	385	413	457	494	457	404
115°	707	720	752	777	784	697
125°	990	994	1017	1040	1048	884
135°	1225	1224	1236	1255	1263	944
145°	1411	1414	1414	1421	1428	882
155°	1546	1547	1543	1548	1544	713
165°	1631	1624	1624	1634	1623	461
175°	1668	1661	1662	1673	1658	159
180°	1668	1668	1668	1668	1668	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	918.0	918.0	918.0	918.0	918.0
2.5°	922.2	919.1	910.9	918.0	917.0
5°	919.1	916.0	908.8	917.0	916.0
7.5°	912.9	910.9	904.7	913.9	912.9
10°	904.7	903.7	898.5	907.8	906.7
12.5°	893.4	893.4	890.3	898.5	898.5
15°	881.0	882.1	879.0	888.2	887.2
17.5°	864.6	867.7	866.6	875.9	874.9
20°	847.1	850.2	851.2	861.5	861.5
22.5°	827.6	831.7	833.7	844.0	846.1
25°	806.0	812.2	815.2	826.6	827.6
27.5°	782.3	791.6	795.7	806.0	807.0
30°	758.7	766.9	774.1	785.4	787.5
32.5°	733.0	743.3	751.5	764.9	766.9
35°	705.2	717.6	727.9	742.3	745.3
37.5°	677.5	691.9	704.2	718.6	721.7
40°	650.8	664.1	678.5	693.9	698.0
42.5°	619.9	635.3	652.8	670.3	673.4
45°	588.0	607.6	627.1	644.6	649.7
47.5°	558.2	577.8	600.4	617.9	624.0
50°	525.3	547.9	570.6	591.1	597.3
52.5°	492.4	515.1	541.8	562.3	568.5
55°	460.6	482.2	513.0	533.6	539.7
57.5°	424.6	451.3	481.1	505.8	510.9
60°	389.6	416.4	450.3	473.9	482.2
62.5°	355.7	385.5	419.4	443.1	451.3
65°	318.7	351.6	386.5	412.2	420.5
67.5°	283.7	318.7	355.7	381.4	389.6
70°	247.8	282.7	321.8	349.5	356.7
72.5°	212.8	248.8	290.9	317.7	325.9
75°	176.8	214.9	258.0	286.8	296.1
77.5°	142.9	183.0	228.2	257.0	267.3
80°	112.1	153.2	198.4	229.3	237.5
82.5°	81.2	124.4	169.6	201.5	210.7
85°	54.5	97.7	143.9	174.8	185.0
87.5°	33.9	76.1	121.3	151.1	160.4
90°	20.1	75.1	129.2	166.5	177.2
92.5°	34.1	67.6	121.8	158.1	166.3
95°	82.0	73.5	116.8	152.1	162.6
97.5°	143.3	200.5	111.7	144.7	155.2
100°	215.9	265.1	133.0	139.6	148.0
102.5°	298.3	335.8	389.9	135.9	144.1
105°	384.8	412.8	457.2	494.1	457.4
107.5°	465.9	487.1	531.8	563.7	575.9
110°	547.2	565.3	608.8	634.9	646.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	626.0	645.8	682.3	703.6	716.8
115°	707.4	720.3	752.0	777.0	784.2
117.5°	781.0	792.1	826.7	847.1	855.3
120°	854.7	862.8	891.4	914.5	920.2
122.5°	924.6	927.1	957.4	979.2	983.9
125°	989.7	993.7	1016.9	1040.2	1047.6
127.5°	1053.3	1053.6	1080.3	1097.6	1103.5
130°	1113.5	1113.7	1133.9	1153.6	1159.8
132.5°	1169.6	1171.1	1188.4	1207.2	1212.0
135°	1224.8	1223.5	1235.7	1254.6	1263.3
137.5°	1274.7	1273.6	1283.9	1301.9	1305.7
140°	1323.3	1324.7	1328.3	1345.4	1351.8
142.5°	1365.9	1370.9	1371.1	1384.9	1389.0
145°	1410.8	1413.5	1413.5	1421.0	1427.6
147.5°	1445.7	1452.2	1451.0	1453.2	1458.6
150°	1484.4	1488.4	1487.2	1487.2	1488.4
152.5°	1515.8	1519.6	1517.1	1519.6	1518.3
155°	1545.8	1547.0	1543.3	1548.3	1544.5
157.5°	1572.0	1572.0	1567.0	1573.2	1567.0
160°	1594.4	1590.7	1589.5	1596.9	1589.5
162.5°	1614.4	1609.4	1608.2	1615.7	1606.9
165°	1630.6	1624.4	1624.4	1634.4	1623.1
167.5°	1644.4	1638.1	1636.9	1648.1	1635.6
170°	1655.6	1648.1	1649.3	1659.3	1646.8
172.5°	1663.1	1655.6	1656.8	1666.8	1653.1
175°	1668.1	1660.6	1661.8	1673.0	1658.1
177.5°	1671.8	1663.1	1665.6	1675.5	1660.6
180°	1668.1	1668.1	1668.1	1668.1	1668.1

(END OF REPORT)