

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: P1033820

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033820
REPORT IS A COMBINATION OF REPORTS P998263 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-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

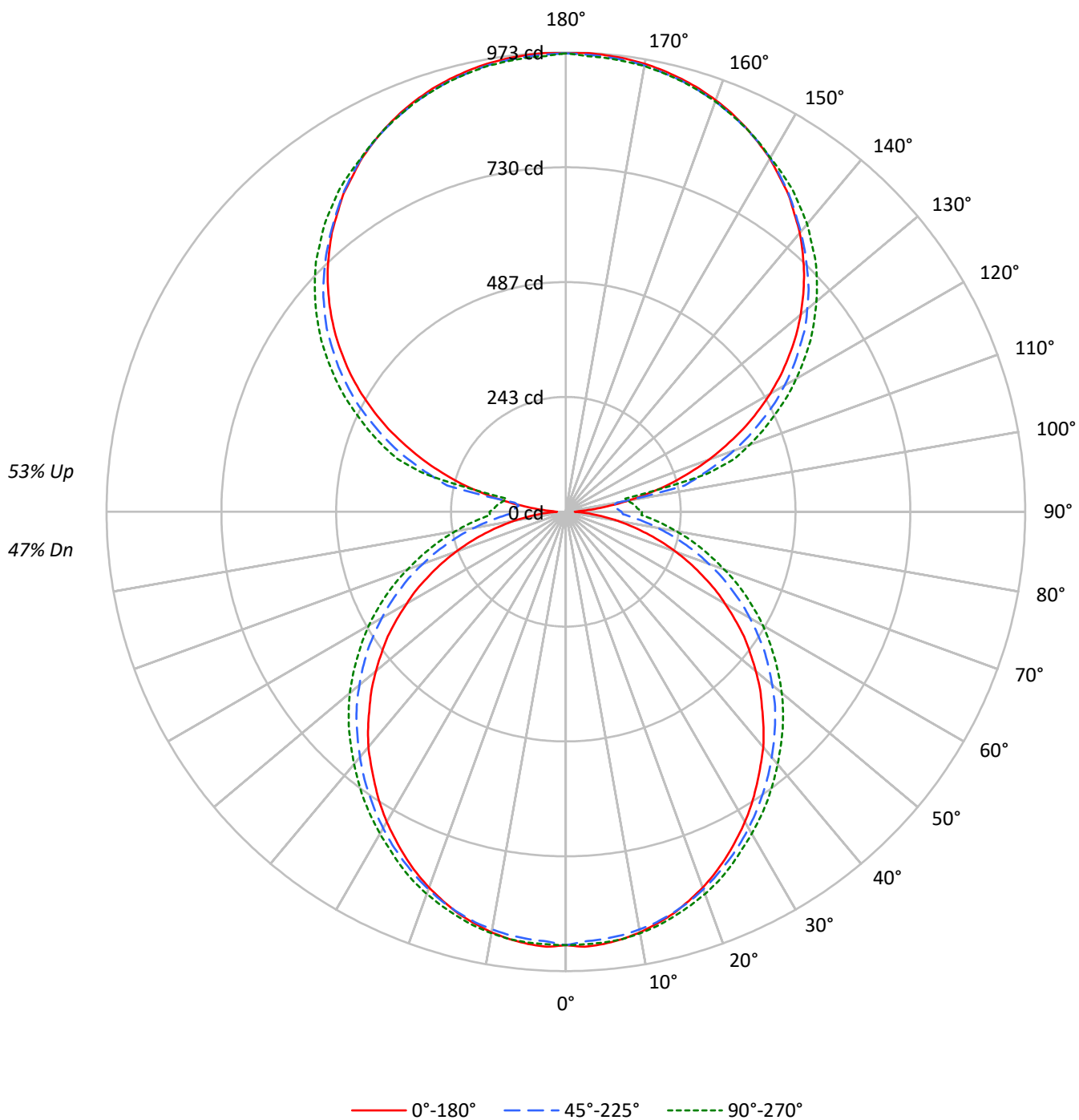
Lumens per Lamp: N/A
Luminaire Lumens: 6136.0 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1033820

CATALOG NUMBER: S124DIW-B795D770UB50-4F0-XX-W2A-D

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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	54	54	54
1	96	91	87	83	88	84	80	77	70	68	65	58	56	54	46	45	43
2	87	79	73	67	80	73	67	62	61	57	53	50	47	44	40	38	36
3	79	69	62	56	72	64	57	52	53	48	44	44	40	37	35	32	30
4	72	61	53	47	66	56	49	44	47	42	37	39	35	31	31	28	26
5	66	54	46	40	61	50	43	37	42	36	32	35	30	27	28	25	22
6	61	49	40	34	56	45	37	32	38	32	28	31	27	23	25	22	19
7	56	44	36	30	51	40	33	28	34	28	24	28	24	21	23	20	17
8	52	40	32	26	48	37	30	25	31	25	21	26	21	18	21	18	15
9	49	36	28	23	44	33	27	22	28	23	19	24	19	16	19	16	14
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	12

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

TEST NUMBER: P1033820

CATALOG NUMBER: S124DIW-B795D770UB50-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.0	1.4
10°-20°	249.2	4.1
20°-30°	376.8	6.1
30°-40°	455.9	7.4
40°-50°	482.0	7.9
50°-60°	453.6	7.4
60°-70°	376.4	6.1
70°-80°	264.1	4.3
80°-90°	150.9	2.5
90°-100°	120.9	2.0
100°-110°	277.9	4.5
110°-120°	449.3	7.3
120°-130°	539.3	8.8
130°-140°	561.1	9.1
140°-150°	516.7	8.4
150°-160°	415.0	6.8
160°-170°	267.6	4.4
170°-180°	92.2	1.5
0°-30°	713.1	11.6
0°-40°	1169.0	19.1
0°-60°	2104.5	34.3
0°-90°	2896.0	47.2
90°-120°	848.0	13.8
90°-150°	2465.1	40.2
90°-180°	3240.0	52.8
0°-180°	6136.0	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°	19	68	118	152	162	13
95°	53	62	105	138	148	60
105°	228	253	294	327	309	239
115°	414	426	458	482	489	408
125°	578	580	604	626	632	516
135°	714	713	723	741	749	550
145°	822	823	823	830	835	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	

TEST NUMBER: P1033820

CATALOG NUMBER: S124DIW-B795D770UB50-4F0-XX-W2A-D

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°	18.6	67.8	117.8	151.9	161.6
92.5°	26.3	60.8	110.8	144.0	152.2
95°	53.3	62.5	105.4	137.5	147.5
97.5°	88.5	134.3	100.3	130.6	140.6
100°	130.4	170.2	110.0	125.5	133.4
102.5°	178.3	209.6	257.4	120.8	129.0
105°	227.9	252.7	294.4	326.7	308.7
107.5°	275.1	294.6	335.7	365.0	375.1
110°	321.9	338.5	378.8	403.9	414.3

TEST NUMBER: P1033820

CATALOG NUMBER: S124DIW-B795D770UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	367.3	384.0	419.5	441.3	452.4
115°	414.3	425.6	457.8	481.9	489.1
117.5°	457.1	466.1	499.2	520.1	528.3
120°	499.6	505.6	534.7	556.7	563.5
122.5°	540.2	541.7	570.9	592.3	598.0
125°	577.7	579.6	603.9	625.6	632.5
127.5°	614.8	614.5	638.6	656.4	662.9
130°	649.3	649.1	667.6	686.9	693.1
132.5°	682.0	682.5	697.7	715.9	721.3
135°	713.7	713.0	723.1	740.9	748.6
137.5°	742.7	741.6	749.4	766.3	770.7
140°	771.0	771.4	773.9	789.4	795.4
142.5°	795.4	798.3	798.0	810.7	814.8
145°	821.5	822.7	822.7	829.6	835.2
147.5°	841.8	845.2	844.5	846.2	851.0
150°	864.3	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)