

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: P1033727

Luminaire Tested: S124DIW-B795D1340UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033727
REPORT IS A COMBINATION OF REPORTS P998056 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1340UB40-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

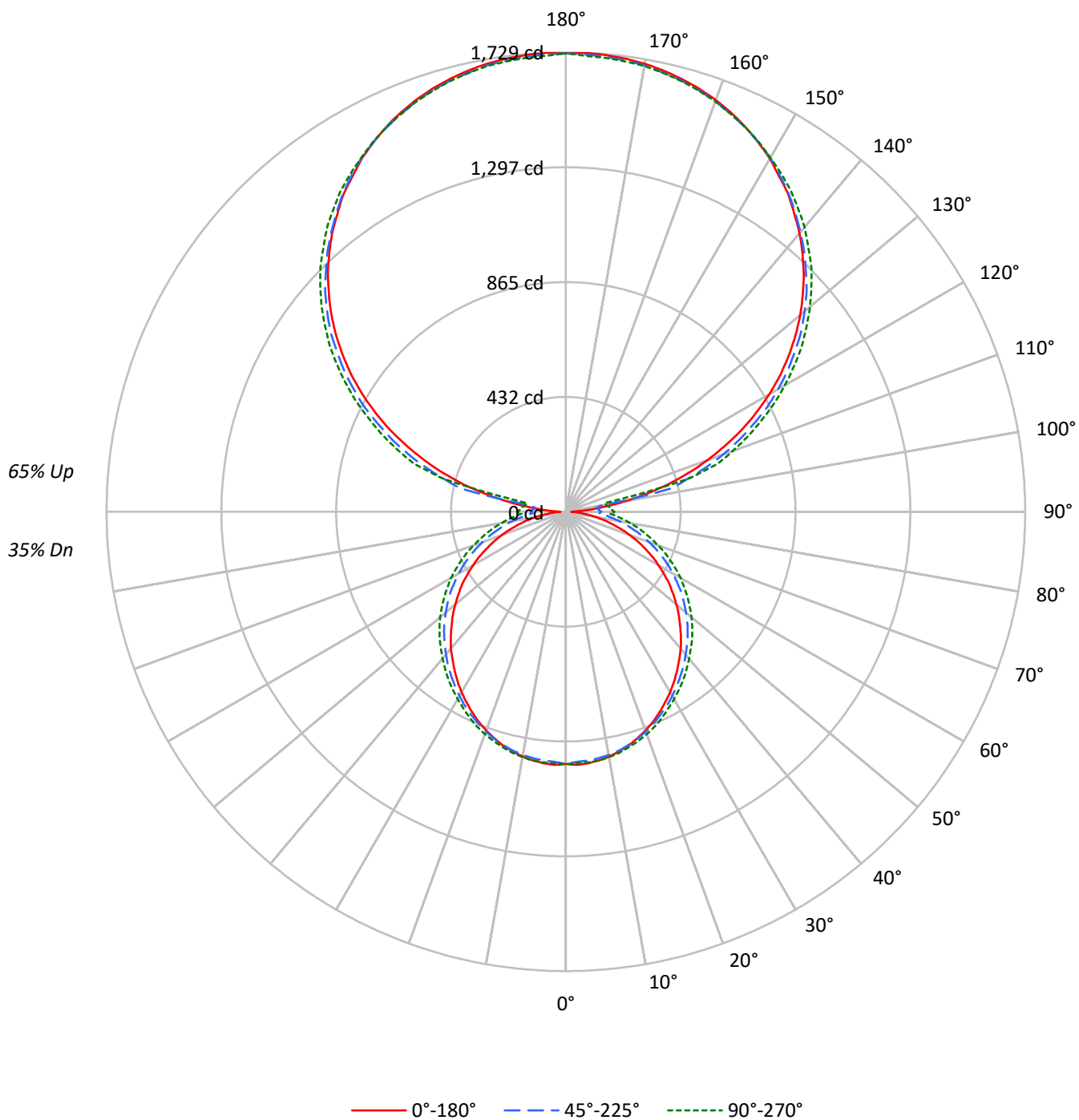
Lumens per Lamp: N/A
Luminaire Lumens: 8579.0 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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
RW	70	50	30	10	70	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
1	94	89	85	81	84	81	77	74	65	62	60	50	48	47	36	35	34
2	85	77	71	66	76	70	65	60	56	52	49	43	41	38	31	30	28
3	77	68	60	54	69	61	55	50	49	45	41	38	35	32	28	25	24
4	71	60	52	46	63	54	47	42	43	38	34	34	30	27	24	22	20
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15
7	55	43	35	29	49	39	32	27	31	26	22	24	21	18	18	15	13
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°	7742	7742	7742
5°	7763	7541	7554
10°	7713	7392	7371
15°	7641	7225	7164
20°	7534	7044	6964
25°	7413	6845	6747
30°	7283	6648	6527
35°	7136	6446	6330
40°	7017	6253	6127
45°	6842	6071	5947
50°	6693	5865	5757
55°	6538	5665	5539
60°	6300	5418	5333
65°	6036	5152	5085
70°	5716	4846	4799
75°	5271	4507	4527
80°	4767	4162	4242
85°	4097	3813	4012

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6842 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.0	1.0
10°-20°	257.7	3.0
20°-30°	389.7	4.5
30°-40°	471.5	5.5
40°-50°	498.4	5.8
50°-60°	469.1	5.5
60°-70°	389.3	4.5
70°-80°	273.2	3.2
80°-90°	157.6	1.8
90°-100°	148.9	1.7
100°-110°	445.0	5.2
110°-120°	765.7	8.9
120°-130°	939.9	11.0
130°-140°	989.1	11.5
140°-150°	916.7	10.7
150°-160°	737.5	8.6
160°-170°	475.6	5.5
170°-180°	163.9	1.9
0°-30°	737.4	8.6
0°-40°	1208.9	14.1
0°-60°	2176.5	25.4
0°-90°	2996.4	34.9
90°-120°	1359.7	15.8
90°-150°	4205.5	49.0
90°-180°	5583.0	65.1
0°-180°	8579.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	949	949	949	949	949	
5°	950	947	940	948	947	90
15°	911	912	909	919	918	257
25°	834	840	843	855	856	384
35°	729	742	753	768	771	457
45°	608	628	648	667	672	470
55°	476	499	530	552	558	424
65°	330	364	400	426	435	327
75°	183	222	267	297	306	194
85°	56	101	149	181	191	59
90°	21	78	134	172	183	15
95°	85	76	121	157	168	99
105°	398	427	473	511	473	417
115°	732	745	778	804	811	721
125°	1024	1028	1052	1076	1083	914
135°	1267	1265	1278	1298	1307	976
145°	1459	1462	1462	1470	1476	912
155°	1599	1600	1596	1601	1598	737
165°	1686	1680	1680	1690	1679	477
175°	1725	1718	1719	1730	1715	164
180°	1725	1725	1725	1725	1725	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	949.4	949.4	949.4	949.4	949.4
2.5°	953.7	950.5	942.0	949.4	948.4
5°	950.5	947.3	939.9	948.4	947.3
7.5°	944.1	942.0	935.6	945.2	944.1
10°	935.6	934.5	929.2	938.8	937.7
12.5°	923.9	923.9	920.7	929.2	929.2
15°	911.2	912.2	909.0	918.6	917.5
17.5°	894.1	897.3	896.3	905.8	904.8
20°	876.1	879.3	880.3	891.0	891.0
22.5°	855.9	860.1	862.2	872.9	875.0
25°	833.5	839.9	843.1	854.8	855.9
27.5°	809.1	818.7	822.9	833.5	834.6
30°	784.6	793.1	800.6	812.3	814.4
32.5°	758.1	768.7	777.2	791.0	793.1
35°	729.4	742.1	752.7	767.6	770.8
37.5°	700.6	715.5	728.3	743.2	746.4
40°	673.0	686.8	701.7	717.7	721.9
42.5°	641.1	657.1	675.1	693.2	696.4
45°	608.1	628.3	648.5	666.6	671.9
47.5°	577.3	597.5	620.9	639.0	645.4
50°	543.3	566.7	590.1	611.3	617.7
52.5°	509.3	532.7	560.3	581.6	587.9
55°	476.3	498.6	530.5	551.8	558.2
57.5°	439.1	466.7	497.6	523.1	528.4
60°	403.0	430.6	465.7	490.1	498.6
62.5°	367.9	398.7	433.8	458.2	466.7
65°	329.6	363.6	399.8	426.3	434.8
67.5°	293.4	329.6	367.9	394.4	403.0
70°	256.2	292.4	332.8	361.5	368.9
72.5°	220.1	257.3	300.9	328.5	337.0
75°	182.9	222.2	266.9	296.6	306.2
77.5°	147.8	189.2	236.0	265.8	276.4
80°	115.9	158.4	205.2	237.1	245.6
82.5°	84.0	128.6	175.4	208.4	218.0
85°	56.3	101.0	148.8	180.7	191.4
87.5°	35.1	78.7	125.5	156.3	165.9
90°	20.9	77.6	133.7	172.2	183.3
92.5°	35.3	70.0	126.0	163.4	172.0
95°	84.8	76.0	120.9	157.3	168.2
97.5°	148.3	207.5	115.6	149.6	160.5
100°	223.3	274.1	137.6	144.3	153.1
102.5°	308.5	347.4	403.3	140.5	149.0
105°	398.0	426.9	472.8	511.0	473.1
107.5°	481.9	503.7	550.1	583.0	595.7
110°	565.9	584.7	629.7	656.7	669.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	647.4	668.0	705.6	727.8	741.4
115°	731.6	745.0	777.8	803.7	811.1
117.5°	807.7	819.3	855.0	876.1	884.6
120°	884.0	892.4	921.9	945.8	951.7
122.5°	956.3	958.9	990.2	1012.8	1017.6
125°	1023.7	1027.8	1051.8	1075.8	1083.4
127.5°	1089.5	1089.7	1117.4	1135.2	1141.4
130°	1151.6	1151.8	1172.7	1193.2	1199.6
132.5°	1209.7	1211.2	1229.1	1248.5	1253.5
135°	1266.7	1265.4	1278.0	1297.6	1306.6
137.5°	1318.3	1317.3	1327.9	1346.5	1350.5
140°	1368.6	1370.2	1373.8	1391.4	1398.1
142.5°	1412.8	1417.9	1418.1	1432.4	1436.6
145°	1459.2	1462.0	1462.0	1469.7	1476.5
147.5°	1495.3	1502.0	1500.7	1503.1	1508.6
150°	1535.3	1539.4	1538.1	1538.1	1539.4
152.5°	1567.8	1571.7	1569.1	1571.7	1570.4
155°	1598.8	1600.1	1596.2	1601.3	1597.5
157.5°	1625.9	1625.9	1620.7	1627.2	1620.7
160°	1649.1	1645.2	1643.9	1651.7	1643.9
162.5°	1669.7	1664.6	1663.3	1671.0	1662.0
165°	1686.5	1680.1	1680.1	1690.4	1678.8
167.5°	1700.7	1694.3	1693.0	1704.6	1691.7
170°	1712.3	1704.6	1705.9	1716.2	1703.3
172.5°	1720.1	1712.3	1713.6	1723.9	1709.7
175°	1725.2	1717.5	1718.8	1730.4	1714.9
177.5°	1729.1	1720.1	1722.6	1733.0	1717.5
180°	1725.2	1725.2	1725.2	1725.2	1725.2

(END OF REPORT)