

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: P1033346

Luminaire Tested: S124DIW-B1195D470UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033346
REPORT IS A COMBINATION OF REPORTS P997202 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D470UB40-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

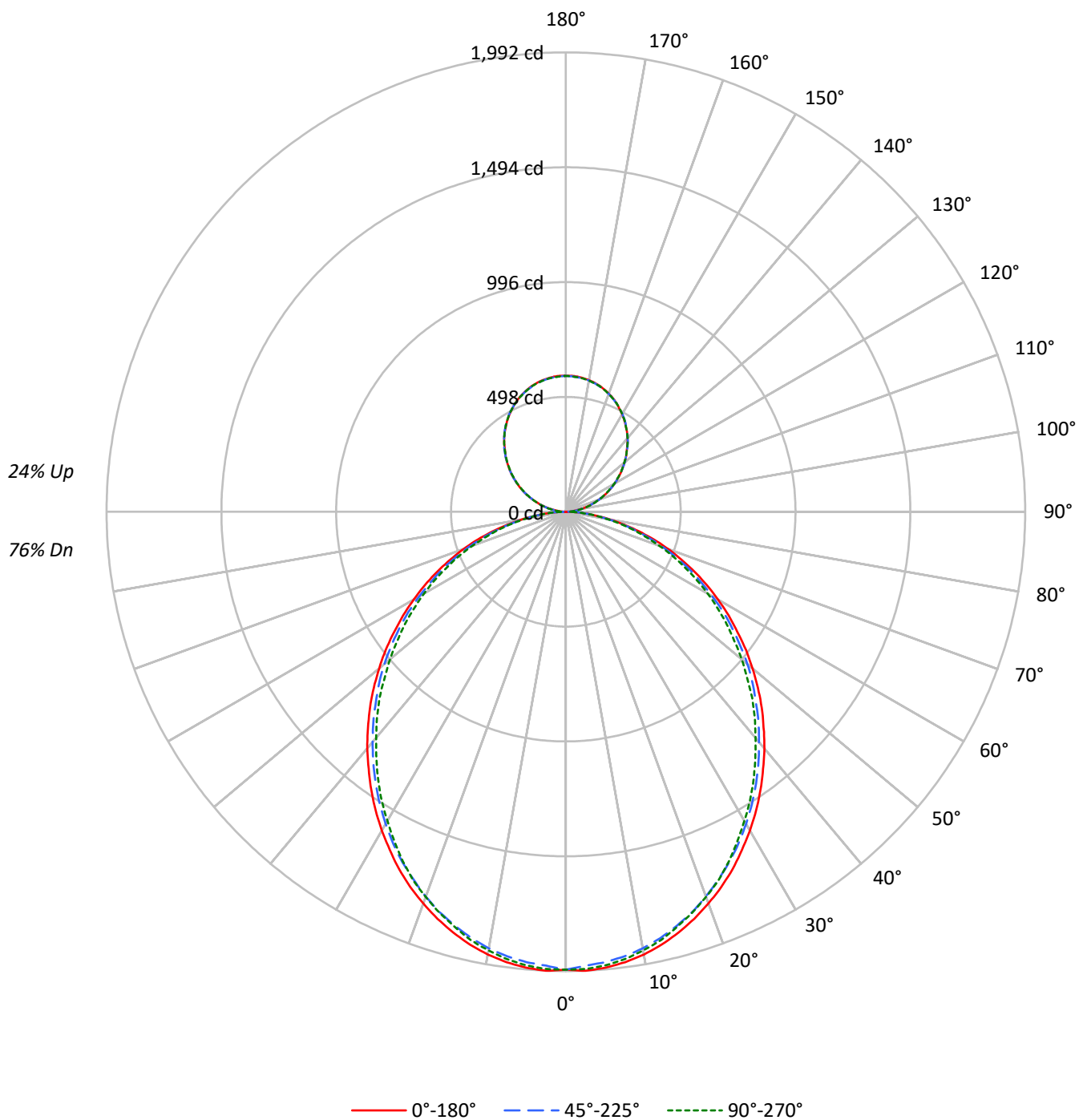
Lumens per Lamp: N/A
Luminaire Lumens: 6733.0 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

TEST NUMBER: P1033346

CATALOG NUMBER: S124DIW-B1195D470UB40-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1033346

CATALOG NUMBER: S124DIW-B1195D470UB40-4F0-XX-W2A-F1

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	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80
1	104	99	95	91	98	94	91	87	86	83	80	78	76	74	70	69	67
2	94	86	80	75	89	83	77	72	75	71	67	68	65	62	62	59	57
3	86	76	68	62	82	73	66	60	66	61	56	60	56	52	55	51	48
4	79	67	59	53	75	65	57	51	59	53	48	54	49	45	49	45	42
5	72	60	52	45	69	58	50	44	53	46	41	48	43	39	44	40	36
6	67	54	46	40	63	52	44	39	48	41	36	44	38	34	40	36	32
7	62	49	41	35	59	47	39	34	43	37	32	40	34	30	37	32	29
8	58	45	37	31	55	43	36	30	40	33	29	37	31	27	34	29	26
9	54	41	33	28	51	40	32	27	37	30	26	34	28	24	31	27	23
10	50	38	30	25	48	36	29	25	34	28	23	31	26	22	29	24	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16193	16193	16193
5°	16206	15728	15747
10°	16069	15291	15184
15°	15839	14772	14549
20°	15545	14210	13892
25°	15213	13617	13184
30°	14814	12976	12407
35°	14400	12318	11656
40°	13969	11612	10857
45°	13517	10904	10111
50°	13016	10216	9284
55°	12472	9414	8463
60°	11915	8534	7608
65°	11277	7627	6644
70°	10544	6534	5610
75°	9446	5267	4493
80°	8049	3809	3161
85°	6251	2119	1702

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13517 cd/sqm

TEST NUMBER: P1033346

CATALOG NUMBER: S124DIW-B1195D470UB40-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.2	2.8
10°-20°	527.3	7.8
20°-30°	776.1	11.5
30°-40°	902.1	13.4
40°-50°	902.1	13.4
50°-60°	789.0	11.7
60°-70°	585.7	8.7
70°-80°	332.3	4.9
80°-90°	96.5	1.4
90°-100°	38.4	0.6
100°-110°	115.0	1.7
110°-120°	195.4	2.9
120°-130°	257.7	3.8
130°-140°	289.5	4.3
140°-150°	284.5	4.2
150°-160°	239.3	3.6
160°-170°	159.2	2.4
170°-180°	55.7	0.8
0°-30°	1490.6	22.1
0°-40°	2392.7	35.5
0°-60°	4083.7	60.7
0°-90°	5098.2	75.7
90°-120°	348.8	5.2
90°-150°	1180.5	17.5
90°-180°	1635.0	24.3
0°-180°	6733.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1986	1986	1986	1986	1986	
5°	1984	1978	1960	1978	1975	188
15°	1889	1882	1858	1868	1863	532
25°	1710	1699	1677	1679	1672	787
35°	1472	1461	1438	1427	1419	920
45°	1201	1190	1165	1147	1142	926
55°	909	904	882	862	853	814
65°	616	608	592	576	568	609
75°	328	320	312	306	304	348
85°	86	86	83	83	81	92
90°	1	6	10	13	14	8
95°	27	31	35	36	36	30
105°	106	107	108	110	111	113
115°	199	199	198	197	197	196
125°	289	289	289	288	287	258
135°	373	376	376	375	374	289
145°	453	455	456	455	454	284
155°	520	520	519	521	519	239
165°	566	564	563	566	564	159
175°	588	586	586	589	586	56
180°	589	589	589	589	589	

TEST NUMBER: P1033346

CATALOG NUMBER: S124DIW-B1195D470UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1985.8	1985.8	1985.8	1985.8	1985.8
2.5°	1992.2	1987.4	1969.9	1985.8	1984.2
5°	1984.2	1977.9	1960.4	1977.9	1974.7
7.5°	1969.9	1963.5	1944.5	1958.8	1957.2
10°	1949.2	1942.9	1922.2	1934.9	1931.7
12.5°	1922.2	1915.8	1893.5	1907.9	1903.1
15°	1888.8	1882.4	1858.5	1868.1	1863.3
17.5°	1850.6	1842.6	1820.3	1826.7	1823.5
20°	1807.6	1799.7	1775.8	1780.6	1777.4
22.5°	1761.5	1750.3	1726.5	1736.0	1729.6
25°	1710.5	1699.4	1677.1	1678.7	1672.4
27.5°	1653.3	1642.1	1621.4	1618.3	1610.3
30°	1596.0	1583.2	1562.6	1556.2	1548.2
32.5°	1535.5	1524.4	1502.1	1494.1	1486.2
35°	1471.9	1460.7	1438.4	1427.3	1419.4
37.5°	1405.0	1395.5	1371.6	1360.5	1349.3
40°	1339.8	1327.1	1303.2	1287.3	1279.3
42.5°	1269.8	1263.4	1236.4	1217.3	1212.5
45°	1201.4	1190.2	1164.8	1147.3	1142.5
47.5°	1129.8	1121.8	1097.9	1078.8	1066.1
50°	1056.6	1050.2	1027.9	1005.6	996.1
52.5°	985.0	977.0	953.1	934.0	921.3
55°	908.6	903.8	881.5	862.4	852.9
57.5°	837.0	832.2	809.9	790.8	781.3
60°	762.2	754.2	733.5	719.2	711.3
62.5°	689.0	682.6	660.3	647.6	639.7
65°	615.8	607.8	591.9	576.0	568.1
67.5°	541.0	534.6	518.7	502.8	501.2
70°	472.6	461.4	448.7	436.0	431.2
72.5°	399.4	388.3	378.7	369.2	364.4
75°	327.8	319.8	311.9	305.5	303.9
77.5°	257.8	254.6	246.6	245.0	240.3
80°	195.7	190.9	187.8	184.6	183.0
82.5°	135.3	133.7	133.7	132.1	130.5
85°	85.9	85.9	82.7	82.7	81.2
87.5°	41.4	39.8	38.2	38.2	38.2
90°	1.4	6.4	10.0	12.8	13.7
92.5°	11.8	17.8	20.0	21.4	21.9
95°	27.3	31.4	34.6	36.0	36.0
97.5°	43.7	47.4	51.0	52.9	52.9
100°	63.8	65.6	69.7	70.6	70.6
102.5°	84.8	85.2	88.9	90.2	90.7
105°	106.2	106.6	108.4	109.8	111.2
107.5°	128.5	129.0	129.4	131.2	130.8
110°	151.3	152.2	151.7	150.8	152.2



TEST NUMBER: P1033346

CATALOG NUMBER: S124DIW-B1195D470UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.0	175.0	174.1	174.1	174.1
115°	198.7	198.7	197.8	197.3	196.8
117.5°	221.0	221.0	220.5	219.2	217.8
120°	243.3	245.1	243.8	241.5	242.4
122.5°	266.6	267.0	266.6	265.2	262.9
125°	289.3	289.3	288.9	288.0	287.1
127.5°	309.9	311.2	310.3	309.4	308.9
130°	331.7	333.1	333.1	332.2	330.4
132.5°	354.1	355.0	354.5	353.6	353.1
135°	373.2	375.9	375.9	375.0	373.6
137.5°	394.6	396.0	396.9	395.5	396.0
140°	416.0	416.9	416.9	416.5	416.0
142.5°	435.6	436.5	436.1	436.1	436.1
145°	453.4	455.2	455.7	455.2	453.8
147.5°	471.6	473.9	473.4	473.0	472.5
150°	488.0	489.8	489.8	489.8	489.4
152.5°	503.5	504.4	504.9	506.2	504.9
155°	519.5	519.5	519.0	520.8	519.0
157.5°	533.1	532.2	532.2	533.6	532.2
160°	545.0	544.5	544.1	545.4	543.2
162.5°	555.9	554.5	554.1	556.8	554.5
165°	565.5	564.1	563.2	565.9	564.1
167.5°	573.2	571.4	571.4	574.1	571.4
170°	579.6	577.3	577.8	580.5	577.3
172.5°	584.2	582.3	582.3	585.5	582.3
175°	588.3	586.0	585.5	588.7	585.5
177.5°	590.1	587.8	587.8	591.0	587.4
180°	589.2	589.2	589.2	589.2	589.2

(END OF REPORT)