

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: P1033817

Luminaire Tested: S124DIW-B795D770UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033817
REPORT IS A COMBINATION OF REPORTS P998258 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D770UB40-4F0-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

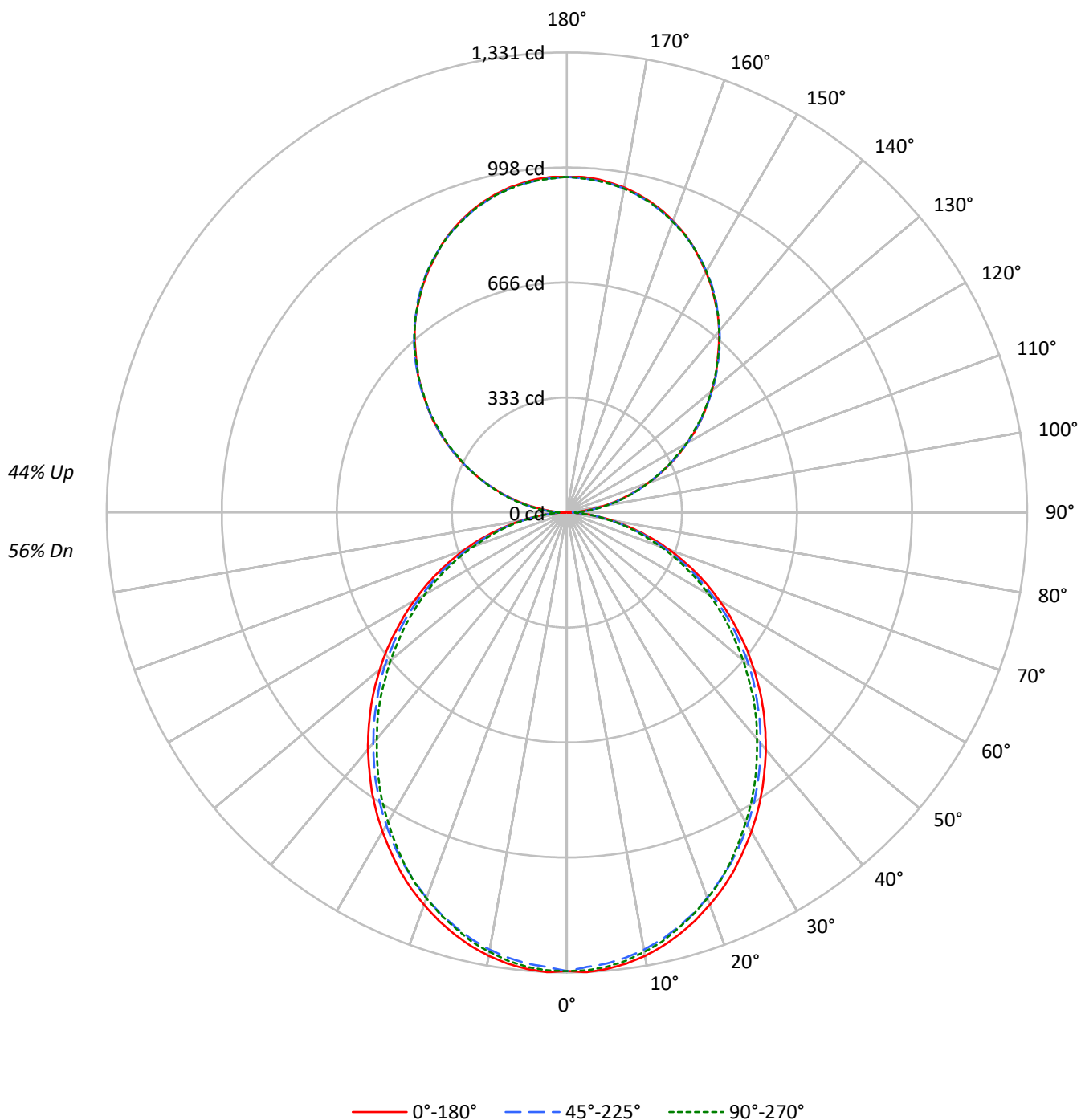
Lumens per Lamp: N/A
Luminaire Lumens: 6101.0 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52
2	90	83	76	71	84	77	72	67	67	62	59	57	54	51	48	46	44
3	82	73	65	59	76	68	61	56	59	54	49	50	46	43	42	40	37
4	75	64	56	50	70	60	53	48	52	47	42	45	40	37	38	35	32
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28
6	64	51	43	37	59	48	41	36	42	36	32	36	32	28	31	27	25
7	59	47	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22
8	55	42	34	29	51	40	33	28	35	29	25	30	26	22	26	22	20
9	51	39	31	26	47	36	29	25	32	26	22	28	23	20	24	20	18
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10821	10821	10821
5°	10830	10510	10523
10°	10738	10218	10146
15°	10584	9871	9722
20°	10387	9495	9283
25°	10166	9099	8810
30°	9899	8671	8291
35°	9623	8232	7789
40°	9335	7759	7255
45°	9032	7286	6756
50°	8697	6827	6204
55°	8334	6291	5655
60°	7961	5703	5084
65°	7536	5096	4439
70°	7045	4367	3750
75°	6311	3519	3003
80°	5380	2545	2113
85°	4177	1417	1136

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9032 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.1	2.1
10°-20°	352.4	5.8
20°-30°	518.6	8.5
30°-40°	602.8	9.9
40°-50°	602.8	9.9
50°-60°	527.2	8.6
60°-70°	391.4	6.4
70°-80°	222.1	3.6
80°-90°	65.7	1.1
90°-100°	63.3	1.0
100°-110°	189.5	3.1
110°-120°	321.9	5.3
120°-130°	424.5	7.0
130°-140°	476.8	7.8
140°-150°	468.6	7.7
150°-160°	394.2	6.5
160°-170°	262.3	4.3
170°-180°	91.8	1.5
0°-30°	996.1	16.3
0°-40°	1598.9	26.2
0°-60°	2728.9	44.7
0°-90°	3408.1	55.9
90°-120°	574.6	9.4
90°-150°	1944.7	31.9
90°-180°	2693.0	44.1
0°-180°	6101.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1327	1327	1327	1327	1327	
5°	1326	1322	1310	1322	1320	126
15°	1262	1258	1242	1248	1245	356
25°	1143	1136	1121	1122	1118	526
35°	984	976	961	954	948	615
45°	803	795	778	767	763	619
55°	607	604	589	576	570	544
65°	412	406	396	385	380	407
75°	219	214	208	204	203	232
85°	57	57	55	55	54	62
90°	2	10	16	21	22	7
95°	45	52	57	59	59	49
105°	175	176	179	181	183	185
115°	327	327	326	325	324	323
125°	477	477	476	474	473	425
135°	615	619	619	618	616	476
145°	747	750	751	750	748	467
155°	856	856	855	858	855	394
165°	932	929	928	932	929	263
175°	969	965	964	970	964	92
180°	971	971	971	971	971	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1327.0	1327.0	1327.0	1327.0	1327.0
2.5°	1331.3	1328.1	1316.4	1327.0	1325.9
5°	1325.9	1321.7	1310.0	1321.7	1319.6
7.5°	1316.4	1312.1	1299.4	1308.9	1307.9
10°	1302.5	1298.3	1284.5	1293.0	1290.8
12.5°	1284.5	1280.2	1265.3	1274.9	1271.7
15°	1262.1	1257.9	1241.9	1248.3	1245.1
17.5°	1236.6	1231.3	1216.4	1220.7	1218.5
20°	1207.9	1202.6	1186.6	1189.8	1187.7
22.5°	1177.1	1169.6	1153.7	1160.1	1155.8
25°	1143.0	1135.6	1120.7	1121.8	1117.5
27.5°	1104.8	1097.3	1083.5	1081.4	1076.1
30°	1066.5	1058.0	1044.2	1039.9	1034.6
32.5°	1026.1	1018.6	1003.8	998.4	993.1
35°	983.6	976.1	961.2	953.8	948.5
37.5°	938.9	932.5	916.6	909.1	901.7
40°	895.3	886.8	870.8	860.2	854.9
42.5°	848.5	844.3	826.2	813.4	810.2
45°	802.8	795.3	778.3	766.6	763.4
47.5°	754.9	749.6	733.7	720.9	712.4
50°	706.0	701.8	686.9	672.0	665.6
52.5°	658.2	652.9	636.9	624.2	615.7
55°	607.1	604.0	589.1	576.3	569.9
57.5°	559.3	556.1	541.2	528.5	522.1
60°	509.3	504.0	490.2	480.6	475.3
62.5°	460.4	456.2	441.3	432.8	427.4
65°	411.5	406.2	395.5	384.9	379.6
67.5°	361.5	357.3	346.6	336.0	334.9
70°	315.8	308.4	299.9	291.3	288.2
72.5°	266.9	259.4	253.1	246.7	243.5
75°	219.0	213.7	208.4	204.2	203.1
77.5°	172.3	170.1	164.8	163.7	160.6
80°	130.8	127.6	125.5	123.3	122.3
82.5°	90.4	89.3	89.3	88.3	87.2
85°	57.4	57.4	55.3	55.3	54.2
87.5°	27.6	26.6	25.5	25.5	25.5
90°	2.3	10.5	16.5	21.0	22.5
92.5°	19.5	29.3	33.0	35.3	36.0
95°	45.0	51.8	57.0	59.3	59.3
97.5°	72.1	78.1	84.1	87.1	87.1
100°	105.1	108.1	114.8	116.3	116.3
102.5°	139.6	140.4	146.4	148.6	149.4
105°	174.9	175.6	178.6	180.9	183.2
107.5°	211.7	212.4	213.2	216.2	215.4
110°	249.2	250.7	250.0	248.5	250.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	288.2	288.2	286.7	286.7	286.7
115°	327.3	327.3	325.8	325.0	324.3
117.5°	364.1	364.1	363.3	361.0	358.8
120°	400.8	403.8	401.6	397.8	399.3
122.5°	439.1	439.9	439.1	436.9	433.1
125°	476.6	476.6	475.9	474.4	472.9
127.5°	510.4	512.7	511.2	509.7	508.9
130°	546.5	548.7	548.7	547.2	544.2
132.5°	583.2	584.7	584.0	582.5	581.7
135°	614.8	619.3	619.3	617.8	615.5
137.5°	650.0	652.3	653.8	651.5	652.3
140°	685.3	686.8	686.8	686.1	685.3
142.5°	717.6	719.1	718.3	718.3	718.3
145°	746.9	749.9	750.6	749.9	747.6
147.5°	776.9	780.6	779.9	779.1	778.4
150°	803.9	806.9	806.9	806.9	806.2
152.5°	829.4	830.9	831.7	833.9	831.7
155°	855.7	855.7	855.0	858.0	855.0
157.5°	878.2	876.7	876.7	879.0	876.7
160°	897.7	897.0	896.2	898.5	894.7
162.5°	915.8	913.5	912.8	917.3	913.5
165°	931.5	929.3	927.8	932.3	929.3
167.5°	944.3	941.3	941.3	945.8	941.3
170°	954.8	951.0	951.8	956.3	951.0
172.5°	962.3	959.3	959.3	964.5	959.3
175°	969.1	965.3	964.5	969.8	964.5
177.5°	972.1	968.3	968.3	973.6	967.5
180°	970.6	970.6	970.6	970.6	970.6

(END OF REPORT)