

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: P1033816

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033816
REPORT IS A COMBINATION OF REPORTS P998257 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-F
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

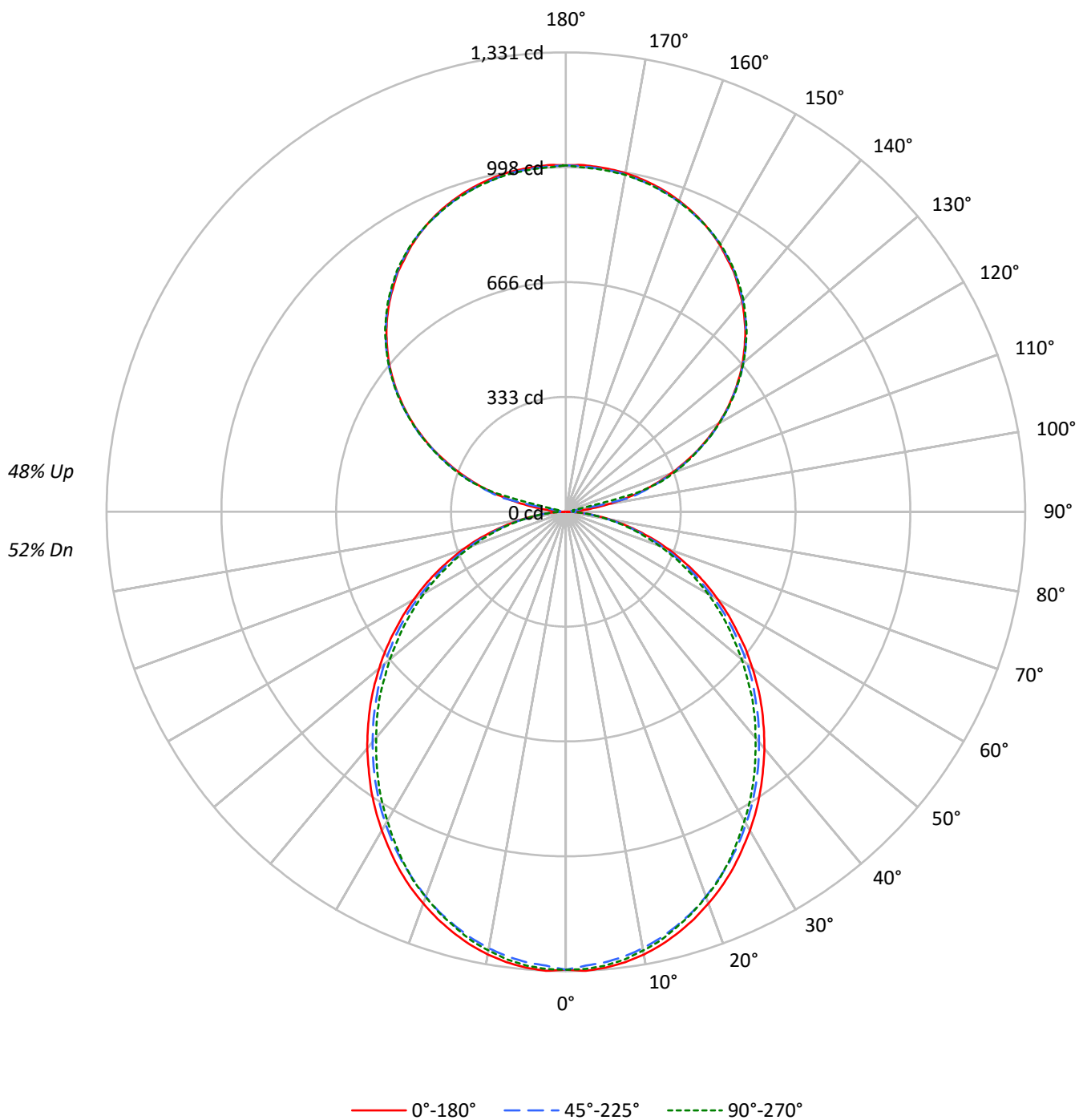
Lumens per Lamp: N/A
Luminaire Lumens: 6514.0 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1033816

CATALOG NUMBER: S124DIW-B795D770UB40-4F0-XX-W2A-F

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
RCR																	
0	108	108	108	108	100	100	100	100	85	85	85		71	71	71		58
1	98	94	90	86	91	87	84	81	74	72	69		62	61	59		51
2	89	82	76	71	83	76	71	66	65	61	57		55	52	49		45
3	82	72	65	59	75	67	60	55	57	52	48		48	45	42		40
4	75	64	56	50	69	59	52	47	51	45	41		43	39	36		36
5	69	57	49	43	63	53	46	40	46	40	36		39	34	31		32
6	63	51	43	37	58	48	40	35	41	35	31		35	31	27		29
7	58	46	38	32	54	43	36	31	37	32	27		32	27	24		27
8	54	42	34	29	50	39	32	27	34	28	24		29	25	21		25
9	50	38	31	26	47	36	29	24	31	26	22		27	22	19		23
10	47	35	28	23	44	33	26	22	29	23	20		25	20	17		21

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

TEST NUMBER: P1033816

CATALOG NUMBER: S124DIW-B795D770UB40-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.1	1.9
10°-20°	352.4	5.4
20°-30°	518.6	8.0
30°-40°	602.8	9.3
40°-50°	602.8	9.3
50°-60°	527.2	8.1
60°-70°	391.4	6.0
70°-80°	222.1	3.4
80°-90°	65.7	1.0
90°-100°	33.3	0.5
100°-110°	219.4	3.4
110°-120°	419.0	6.4
120°-130°	531.9	8.2
130°-140°	569.0	8.7
140°-150°	532.1	8.2
150°-160°	429.1	6.6
160°-170°	276.7	4.2
170°-180°	95.4	1.5
0°-30°	996.1	15.3
0°-40°	1598.9	24.5
0°-60°	2728.9	41.9
0°-90°	3408.1	52.3
90°-120°	671.8	10.3
90°-150°	2304.8	35.4
90°-180°	3106.0	47.7
0°-180°	6514.0	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	6
95°	41	16	16	21	22	51
105°	226	230	234	241	214	237
115°	422	424	423	425	425	415
125°	593	596	595	597	598	530
135°	736	735	738	740	741	567
145°	848	851	851	851	853	530
155°	930	931	929	932	929	429
165°	981	978	978	984	977	277
175°	1004	999	1000	1007	998	96
180°	1004	1004	1004	1004	1004	

TEST NUMBER: P1033816

CATALOG NUMBER: S124DIW-B795D770UB40-4F0-XX-W2A-F

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°	11.3	9.8	15.8	20.3	20.3
95°	41.3	15.8	16.5	21.0	21.8
97.5°	78.8	95.3	16.5	20.3	21.0
100°	123.1	136.6	33.0	20.3	21.0
102.5°	172.7	181.7	190.7	21.8	21.8
105°	226.0	230.5	234.2	241.0	214.0
107.5°	274.8	277.0	282.3	286.0	289.0
110°	324.3	326.6	331.1	332.6	334.8

TEST NUMBER: P1033816

CATALOG NUMBER: S124DIW-B795D770UB40-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	372.4	376.9	378.4	377.6	380.6
115°	421.9	424.2	423.4	424.9	424.9
117.5°	466.2	469.2	471.5	470.7	470.7
120°	511.3	514.3	513.5	515.0	513.5
122.5°	553.3	554.8	556.3	557.0	555.5
125°	593.1	596.1	594.6	596.8	597.6
127.5°	631.4	632.1	635.9	635.1	634.4
130°	668.2	668.9	671.2	671.9	671.9
132.5°	701.9	703.4	706.4	707.2	706.4
135°	735.7	735.0	738.0	739.5	741.0
137.5°	765.8	765.8	769.5	771.0	770.3
140°	795.0	796.5	798.0	800.3	801.0
142.5°	821.3	824.3	825.1	826.6	826.6
145°	848.3	850.6	850.6	851.3	852.8
147.5°	869.4	873.9	873.1	873.9	874.6
150°	892.6	895.6	894.9	894.9	895.6
152.5°	912.2	914.4	912.9	914.4	913.7
155°	930.2	930.9	928.7	931.7	929.4
157.5°	945.9	945.9	942.9	946.7	942.9
160°	959.4	957.2	956.4	960.9	956.4
162.5°	971.5	968.5	967.7	972.2	967.0
165°	981.2	977.5	977.5	983.5	976.7
167.5°	989.5	985.7	985.0	991.7	984.2
170°	996.2	991.7	992.5	998.5	991.0
172.5°	1000.7	996.2	997.0	1003.0	994.7
175°	1003.7	999.2	1000.0	1006.7	997.7
177.5°	1006.0	1000.7	1002.2	1008.2	999.2
180°	1003.7	1003.7	1003.7	1003.7	1003.7

(END OF REPORT)