

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: P1033355

Luminaire Tested: S124DIW-B1195D770UB27-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033355
REPORT IS A COMBINATION OF REPORTS P997216 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D770UB27-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

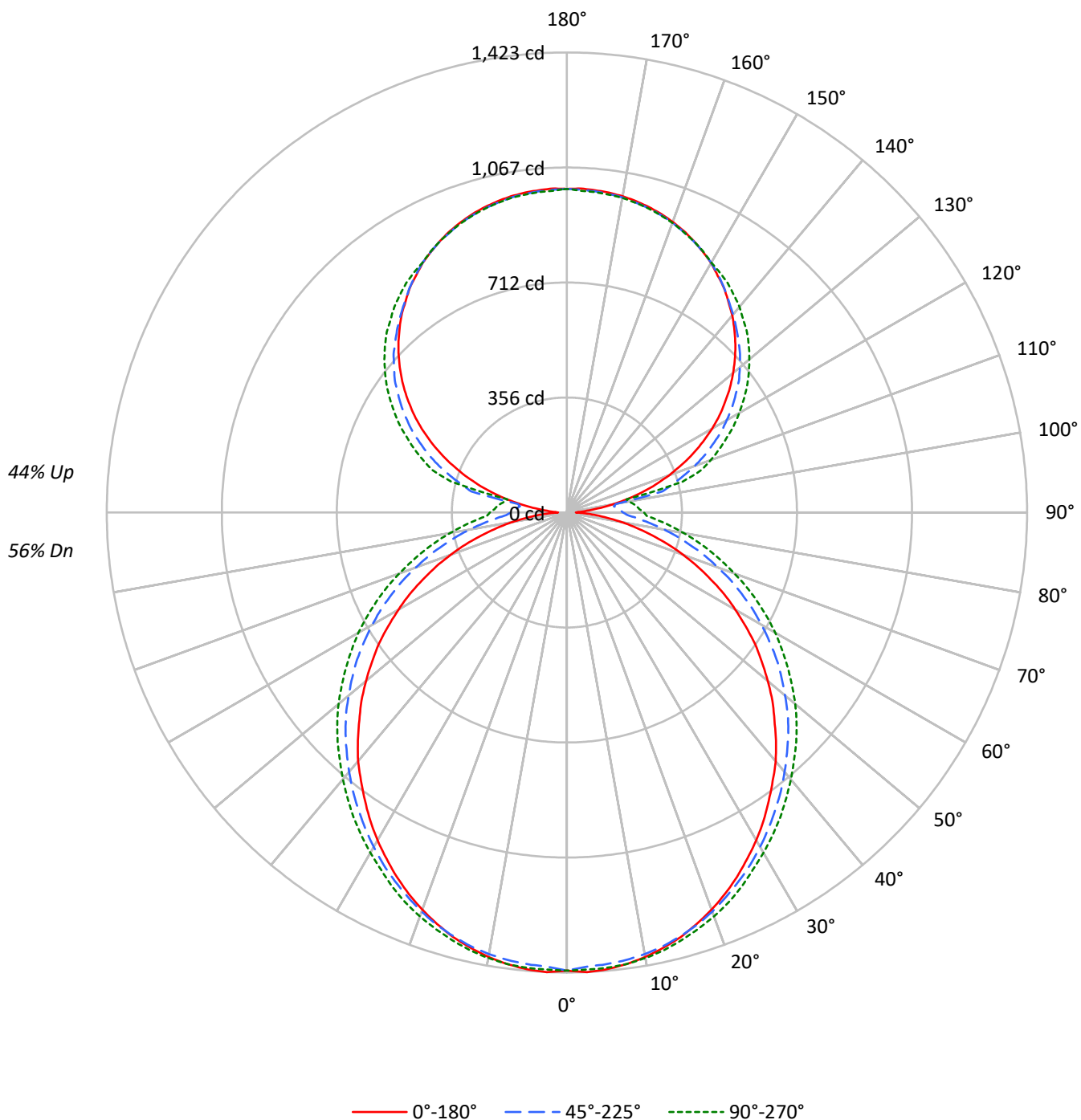
Lumens per Lamp: N/A
Luminaire Lumens: 7930.0 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 84.5
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

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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	98	93	89	85	91	87	83	79	75	72	69	63	61	59	53	51	50
2	89	81	74	68	82	75	69	64	65	60	56	55	52	49	46	43	41
3	81	71	63	56	75	66	59	53	57	51	47	48	44	41	40	37	35
4	74	62	54	47	68	58	51	45	50	44	39	43	38	34	36	32	29
5	68	55	47	40	62	52	44	38	45	39	34	38	33	30	32	28	25
6	62	49	41	35	57	46	39	33	40	34	29	34	30	26	29	25	22
7	57	45	36	31	53	42	34	29	36	30	26	31	26	23	26	23	20
8	53	40	32	27	49	38	31	26	33	27	23	29	24	20	24	20	18
9	50	37	29	24	46	35	28	23	30	24	20	26	21	18	22	19	16
10	46	34	26	21	43	32	25	20	28	22	18	24	20	16	21	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11555	11555	11555
5°	11586	11254	11274
10°	11511	11032	11000
15°	11403	10783	10692
20°	11244	10513	10393
25°	11064	10216	10070
30°	10869	9922	9740
35°	10649	9621	9447
40°	10472	9331	9144
45°	10211	9060	8875
50°	9988	8752	8592
55°	9758	8456	8266
60°	9401	8086	7959
65°	9008	7688	7590
70°	8531	7233	7163
75°	7864	6726	6757
80°	7115	6210	6331
85°	6120	5691	5986

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10211 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.3	1.7
10°-20°	384.7	4.9
20°-30°	581.6	7.3
30°-40°	703.7	8.9
40°-50°	743.9	9.4
50°-60°	700.1	8.8
60°-70°	581.0	7.3
70°-80°	407.7	5.1
80°-90°	231.9	2.9
90°-100°	170.1	2.1
100°-110°	320.1	4.0
110°-120°	485.8	6.1
120°-130°	568.7	7.2
130°-140°	583.9	7.4
140°-150°	533.8	6.7
150°-160°	427.9	5.4
160°-170°	275.9	3.5
170°-180°	95.1	1.2
0°-30°	1100.6	13.9
0°-40°	1804.2	22.8
0°-60°	3248.2	41.0
0°-90°	4468.8	56.4
90°-120°	976.0	12.3
90°-150°	2662.4	33.6
90°-180°	3461.0	43.6
0°-180°	7930.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1417	1417	1417	1417	1417	
5°	1418	1414	1403	1415	1414	135
15°	1360	1361	1357	1371	1369	383
25°	1244	1254	1258	1276	1277	573
35°	1088	1108	1123	1146	1150	682
45°	908	938	968	995	1003	701
55°	711	744	792	824	833	633
65°	492	543	597	636	649	488
75°	273	332	398	443	457	290
85°	84	151	222	270	286	88
90°	28	99	174	224	238	20
95°	62	89	154	202	217	67
105°	240	276	338	385	370	252
115°	430	447	497	533	544	424
125°	598	599	637	670	680	534
135°	737	736	750	777	788	568
145°	848	848	848	858	866	530
155°	928	928	926	929	927	428
165°	978	975	975	981	974	276
175°	1001	996	997	1004	995	95
180°	1001	1001	1001	1001	1001	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1417.0	1417.0	1417.0	1417.0	1417.0
2.5°	1423.3	1418.5	1405.9	1417.0	1415.4
5°	1418.5	1413.8	1402.7	1415.4	1413.8
7.5°	1409.0	1405.9	1396.3	1410.6	1409.0
10°	1396.3	1394.7	1386.8	1401.1	1399.5
12.5°	1378.9	1378.9	1374.1	1386.8	1386.8
15°	1359.8	1361.4	1356.7	1370.9	1369.4
17.5°	1334.5	1339.2	1337.6	1351.9	1350.3
20°	1307.5	1312.2	1313.8	1329.7	1329.7
22.5°	1277.3	1283.7	1286.8	1302.7	1305.9
25°	1244.0	1253.5	1258.3	1275.7	1277.3
27.5°	1207.5	1221.8	1228.1	1244.0	1245.6
30°	1171.0	1183.7	1194.8	1212.3	1215.4
32.5°	1131.3	1147.2	1159.9	1180.5	1183.7
35°	1088.5	1107.5	1123.4	1145.6	1150.4
37.5°	1045.7	1067.9	1086.9	1109.1	1113.9
40°	1004.4	1025.0	1047.2	1071.1	1077.4
42.5°	956.8	980.6	1007.6	1034.6	1039.3
45°	907.6	937.8	967.9	994.9	1002.8
47.5°	861.6	891.7	926.7	953.6	963.2
50°	810.8	845.7	880.6	912.4	921.9
52.5°	760.0	795.0	836.2	867.9	877.5
55°	710.9	744.2	791.8	823.5	833.0
57.5°	655.3	696.6	742.6	780.7	788.6
60°	601.4	642.6	695.0	731.5	744.2
62.5°	549.0	595.0	647.4	683.9	696.6
65°	491.9	542.7	596.6	636.3	649.0
67.5°	437.9	491.9	549.0	588.7	601.4
70°	382.4	436.4	496.7	539.5	550.6
72.5°	328.5	384.0	449.0	490.3	503.0
75°	272.9	331.6	398.3	442.7	457.0
77.5°	220.6	282.4	352.3	396.7	412.6
80°	173.0	236.4	306.2	353.8	366.5
82.5°	125.4	192.0	261.8	311.0	325.3
85°	84.1	150.7	222.1	269.7	285.6
87.5°	52.4	117.4	187.2	233.3	247.5
90°	27.6	99.4	173.6	224.1	238.3
92.5°	35.0	89.0	163.3	212.2	224.9
95°	61.8	88.7	154.5	201.9	216.9
97.5°	97.6	160.2	146.6	191.6	206.6
100°	140.3	194.9	153.5	183.6	195.5
102.5°	189.7	233.6	302.8	175.6	188.3
105°	239.6	275.8	338.3	384.7	370.4
107.5°	288.3	317.5	378.3	421.7	435.8
110°	336.1	360.5	420.5	458.5	473.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	382.4	405.9	459.8	493.9	509.6
115°	430.2	446.7	496.8	533.2	544.3
117.5°	474.4	486.9	536.7	569.4	582.1
120°	517.7	525.5	570.7	603.9	615.1
122.5°	559.6	561.1	605.5	637.9	647.5
125°	597.7	599.2	637.3	669.7	680.0
127.5°	635.8	635.1	670.5	698.4	708.7
130°	671.0	670.2	697.8	727.1	736.6
132.5°	704.7	704.6	726.6	754.4	763.1
135°	736.8	736.0	750.1	777.0	788.0
137.5°	766.7	765.1	775.2	800.5	807.7
140°	795.9	795.8	798.9	821.8	830.4
142.5°	820.5	823.5	822.7	841.7	848.0
145°	847.5	848.1	848.1	858.4	866.3
147.5°	868.4	871.3	870.6	872.9	880.0
150°	891.6	893.0	892.3	892.3	893.0
152.5°	909.5	911.8	910.3	911.8	911.0
155°	927.5	928.2	926.0	929.0	926.7
157.5°	943.2	943.2	940.2	943.9	940.2
160°	956.7	954.4	953.7	958.2	953.7
162.5°	968.6	965.7	964.9	969.4	964.2
165°	978.4	974.6	974.6	980.6	973.9
167.5°	986.6	982.9	982.1	988.9	981.4
170°	993.3	988.9	989.6	995.6	988.1
172.5°	997.8	993.3	994.1	1000.1	991.9
175°	1000.8	996.3	997.1	1003.8	994.8
177.5°	1003.1	997.8	999.3	1005.3	996.3
180°	1000.8	1000.8	1000.8	1000.8	1000.8

(END OF REPORT)