

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: P1024846

Luminaire Tested: S124DIP-B1020D1035UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024846
REPORT IS A COMBINATION OF REPORTS P995176 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1035UB50-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

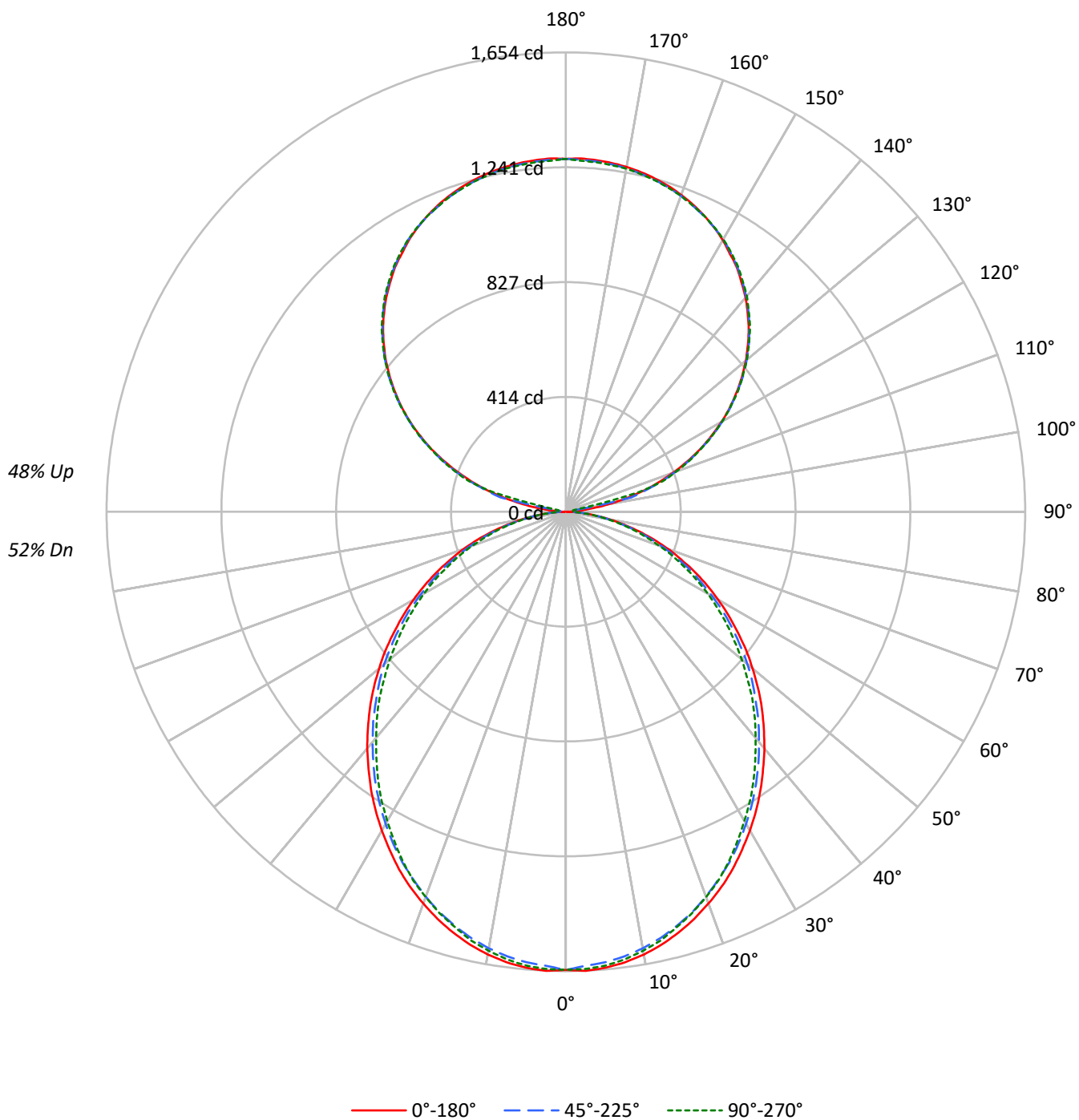
Lumens per Lamp: N/A
Luminaire Lumens: 8167.0 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 75.3
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	108	108	108	108	99	99	99	99	84	84	84	71	71	71	58	58	58
1	98	94	90	86	91	87	84	80	74	71	69	62	60	59	51	50	49
2	89	82	76	71	82	76	71	66	65	61	57	54	52	49	45	43	41
3	82	72	65	59	75	67	60	55	57	52	48	48	44	41	40	37	35
4	75	64	56	50	69	59	52	47	51	45	41	43	39	36	36	33	30
5	68	57	49	43	63	53	46	40	45	40	35	39	34	31	32	29	26
6	63	51	43	37	58	47	40	35	41	35	31	35	30	27	29	26	23
7	58	46	38	32	54	43	36	31	37	31	27	32	27	24	27	23	21
8	54	42	34	29	50	39	32	27	34	28	24	29	25	21	24	21	18
9	50	38	31	26	47	36	29	24	31	26	22	27	22	19	23	19	17
10	47	35	28	23	44	33	26	22	29	23	20	25	20	17	21	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13448	13448	13448
5°	13460	13062	13078
10°	13345	12698	12610
15°	13154	12268	12082
20°	12910	11802	11537
25°	12635	11309	10949
30°	12302	10776	10304
35°	11959	10230	9681
40°	11601	9644	9017
45°	11225	9055	8397
50°	10810	8485	7710
55°	10358	7818	7028
60°	9895	7088	6318
65°	9365	6335	5518
70°	8757	5427	4659
75°	7844	4374	3732
80°	6683	3162	2626
85°	5196	1760	1413

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11225 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.4	1.9
10°-20°	437.9	5.4
20°-30°	644.5	7.9
30°-40°	749.2	9.2
40°-50°	749.1	9.2
50°-60°	655.2	8.0
60°-70°	486.5	6.0
70°-80°	276.0	3.4
80°-90°	81.7	1.0
90°-100°	42.2	0.5
100°-110°	277.7	3.4
110°-120°	530.3	6.5
120°-130°	673.3	8.2
130°-140°	720.3	8.8
140°-150°	673.5	8.2
150°-160°	543.1	6.7
160°-170°	350.3	4.3
170°-180°	120.7	1.5
0°-30°	1237.9	15.2
0°-40°	1987.1	24.3
0°-60°	3391.5	41.5
0°-90°	4235.6	51.9
90°-120°	850.3	10.4
90°-150°	2917.3	35.7
90°-180°	3931.0	48.1
0°-180°	8167.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1649	1649	1649	1649	1649	
5°	1648	1643	1628	1643	1640	156
15°	1569	1563	1544	1551	1547	442
25°	1421	1411	1393	1394	1389	654
35°	1222	1213	1195	1185	1179	764
45°	998	988	967	953	949	769
55°	755	751	732	716	708	676
65°	511	505	492	478	472	506
75°	272	266	259	254	252	289
85°	71	71	69	69	67	77
90°	3	13	21	27	28	7
95°	52	20	21	27	28	64
105°	286	292	296	305	271	299
115°	534	537	536	538	538	526
125°	751	754	753	756	756	670
135°	931	930	934	936	938	718
145°	1074	1077	1077	1078	1080	671
155°	1177	1178	1176	1179	1176	543
165°	1242	1237	1237	1245	1236	351
175°	1270	1265	1266	1274	1263	121
180°	1270	1270	1270	1270	1270	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1649.2	1649.2	1649.2	1649.2	1649.2
2.5°	1654.5	1650.5	1636.0	1649.2	1647.9
5°	1647.9	1642.6	1628.1	1642.6	1640.0
7.5°	1636.0	1630.7	1614.8	1626.7	1625.4
10°	1618.8	1613.5	1596.3	1606.9	1604.3
12.5°	1596.3	1591.1	1572.6	1584.5	1580.5
15°	1568.6	1563.3	1543.5	1551.4	1547.4
17.5°	1536.9	1530.3	1511.8	1517.1	1514.4
20°	1501.2	1494.6	1474.8	1478.7	1476.1
22.5°	1462.9	1453.6	1433.8	1441.7	1436.4
25°	1420.6	1411.3	1392.8	1394.2	1388.9
27.5°	1373.0	1363.8	1346.6	1343.9	1337.3
30°	1325.4	1314.9	1297.7	1292.4	1285.8
32.5°	1275.2	1266.0	1247.5	1240.9	1234.3
35°	1222.4	1213.1	1194.6	1185.4	1178.8
37.5°	1166.9	1158.9	1139.1	1129.9	1120.6
40°	1112.7	1102.1	1082.3	1069.1	1062.5
42.5°	1054.5	1049.3	1026.8	1010.9	1007.0
45°	997.7	988.5	967.3	952.8	948.8
47.5°	938.2	931.6	911.8	896.0	885.4
50°	877.5	872.2	853.7	835.2	827.2
52.5°	818.0	811.4	791.6	775.7	765.1
55°	754.6	750.6	732.1	716.2	708.3
57.5°	695.1	691.1	672.6	656.8	648.8
60°	633.0	626.4	609.2	597.3	590.7
62.5°	572.2	566.9	548.4	537.8	531.2
65°	511.4	504.8	491.6	478.4	471.8
67.5°	449.3	444.0	430.8	417.6	416.3
70°	392.5	383.2	372.7	362.1	358.1
72.5°	331.7	322.4	314.5	306.6	302.6
75°	272.2	265.6	259.0	253.7	252.4
77.5°	214.1	211.4	204.8	203.5	199.5
80°	162.5	158.6	155.9	153.3	152.0
82.5°	112.3	111.0	111.0	109.7	108.4
85°	71.4	71.4	68.7	68.7	67.4
87.5°	34.4	33.0	31.7	31.7	31.7
90°	2.9	13.3	20.9	26.6	28.5
92.5°	14.3	12.4	20.0	25.7	25.7
95°	52.3	20.0	20.9	26.6	27.6
97.5°	99.8	120.7	20.9	25.7	26.6
100°	155.8	172.9	41.8	25.7	26.6
102.5°	218.6	230.0	241.4	27.6	27.6
105°	286.0	291.7	296.5	305.0	270.8
107.5°	347.8	350.6	357.3	362.0	365.9
110°	410.5	413.4	419.1	421.0	423.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	471.3	477.0	478.9	478.0	481.8
115°	534.0	536.9	535.9	537.8	537.8
117.5°	590.1	593.9	596.8	595.8	595.8
120°	647.1	650.9	650.0	651.9	650.0
122.5°	700.3	702.2	704.1	705.1	703.2
125°	750.7	754.5	752.6	755.5	756.4
127.5°	799.2	800.1	804.9	803.9	803.0
130°	845.7	846.7	849.5	850.5	850.5
132.5°	888.5	890.4	894.2	895.1	894.2
135°	931.3	930.3	934.1	936.0	937.9
137.5°	969.3	969.3	974.0	975.9	975.0
140°	1006.3	1008.2	1010.1	1013.0	1013.9
142.5°	1039.6	1043.4	1044.3	1046.2	1046.2
145°	1073.8	1076.6	1076.6	1077.6	1079.5
147.5°	1100.4	1106.1	1105.2	1106.1	1107.1
150°	1129.9	1133.7	1132.7	1132.7	1133.7
152.5°	1154.6	1157.4	1155.5	1157.4	1156.5
155°	1177.4	1178.3	1175.5	1179.3	1176.4
157.5°	1197.3	1197.3	1193.5	1198.3	1193.5
160°	1214.4	1211.6	1210.6	1216.3	1210.6
162.5°	1229.6	1225.8	1224.9	1230.6	1223.9
165°	1242.0	1237.2	1237.2	1244.8	1236.3
167.5°	1252.4	1247.7	1246.7	1255.3	1245.8
170°	1261.0	1255.3	1256.2	1263.8	1254.3
172.5°	1266.7	1261.0	1261.9	1269.6	1259.1
175°	1270.5	1264.8	1265.7	1274.3	1262.9
177.5°	1273.4	1266.7	1268.6	1276.2	1264.8
180°	1270.5	1270.5	1270.5	1270.5	1270.5

(END OF REPORT)