

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: P1024892

Luminaire Tested: S124DIP-B1020D1205UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024892
REPORT IS A COMBINATION OF REPORTS P995237 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1205UB50-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

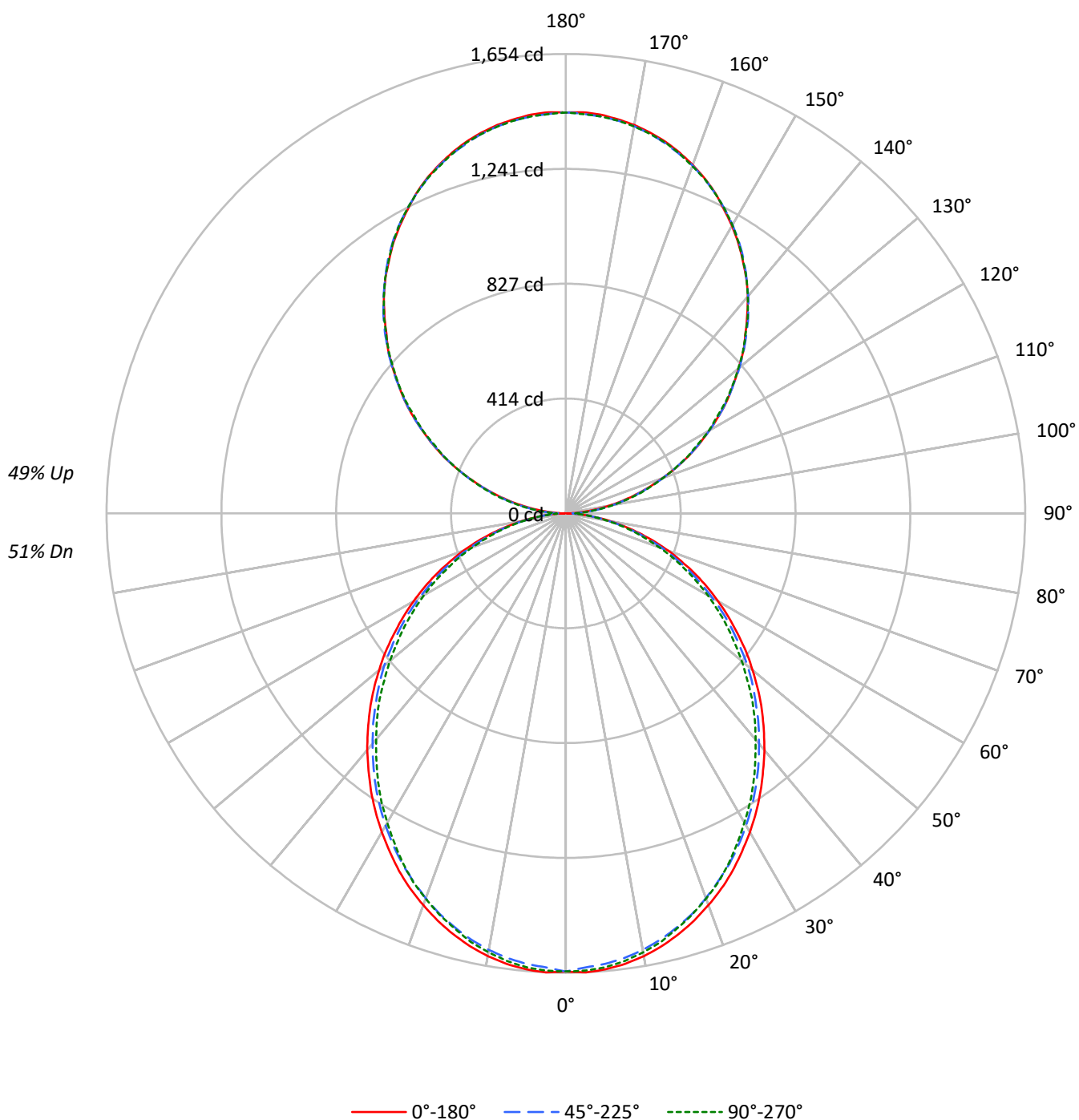
Lumens per Lamp: N/A
Luminaire Lumens: 8241.0 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 81.8
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	50	30	10
RCR																				
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	57	57	57
1	98	94	90	86	90	87	83	80	74	71	69	62	60	58	51	50	48	48	48	48
2	89	82	76	70	82	76	70	66	65	61	57	54	51	49	45	43	41	41	41	41
3	81	72	65	59	75	67	60	55	57	52	48	48	44	41	40	37	35	35	35	35
4	75	64	56	50	69	59	52	47	51	45	41	43	39	35	35	32	30	30	30	30
5	68	57	49	43	63	53	46	40	45	40	35	38	34	31	32	29	26	26	26	26
6	63	51	43	37	58	47	40	35	41	35	31	35	30	27	29	26	23	23	23	23
7	58	46	38	32	54	43	36	31	37	31	27	32	27	24	26	23	20	20	20	20
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18	18	18	18
9	50	38	31	26	47	36	29	24	31	25	22	27	22	19	22	19	17	17	17	17
10	47	35	28	23	44	33	26	22	29	23	19	25	20	17	21	17	15	15	15	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	5.3
20°-30°	644.5	7.8
30°-40°	749.2	9.1
40°-50°	749.1	9.1
50°-60°	655.2	8.0
60°-70°	486.5	5.9
70°-80°	276.0	3.3
80°-90°	82.1	1.0
90°-100°	94.1	1.1
100°-110°	281.8	3.4
110°-120°	478.7	5.8
120°-130°	631.4	7.7
130°-140°	709.1	8.6
140°-150°	697.0	8.5
150°-160°	586.2	7.1
160°-170°	390.0	4.7
170°-180°	136.6	1.7
0°-30°	1237.9	15.0
0°-40°	1987.1	24.1
0°-60°	3391.5	41.2
0°-90°	4236.1	51.4
90°-120°	854.6	10.4
90°-150°	2892.1	35.1
90°-180°	4005.0	48.6
0°-180°	8241.0	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	16	25	31	34	10
95°	67	77	85	88	88	73
105°	260	261	266	269	272	276
115°	487	487	484	483	482	480
125°	709	709	708	706	703	632
135°	914	921	921	919	915	707
145°	1111	1115	1116	1115	1112	695
155°	1273	1273	1272	1276	1272	586
165°	1385	1382	1380	1386	1382	391
175°	1441	1436	1434	1442	1434	137
180°	1443	1443	1443	1443	1443	

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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°	3.3	15.6	24.6	31.3	33.5
92.5°	29.0	43.5	49.1	52.5	53.6
95°	67.0	77.0	84.8	88.2	88.2
97.5°	107.2	116.1	125.0	129.5	129.5
100°	156.3	160.8	170.8	173.0	173.0
102.5°	207.6	208.8	217.7	221.0	222.1
105°	260.1	261.2	265.7	269.0	272.4
107.5°	314.8	315.9	317.0	321.5	320.4
110°	370.6	372.9	371.7	369.5	372.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	428.7	428.7	426.4	426.4	426.4
115°	486.7	486.7	484.5	483.4	482.3
117.5°	541.4	541.4	540.3	537.0	533.6
120°	596.1	600.6	597.2	591.7	593.9
122.5°	653.0	654.2	653.0	649.7	644.1
125°	708.9	708.9	707.7	705.5	703.3
127.5°	759.1	762.4	760.2	758.0	756.9
130°	812.7	816.0	816.0	813.8	809.3
132.5°	867.4	869.6	868.5	866.3	865.1
135°	914.3	921.0	921.0	918.7	915.4
137.5°	966.7	970.1	972.3	969.0	970.1
140°	1019.2	1021.4	1021.4	1020.3	1019.2
142.5°	1067.2	1069.4	1068.3	1068.3	1068.3
145°	1110.7	1115.2	1116.3	1115.2	1111.9
147.5°	1155.4	1161.0	1159.9	1158.7	1157.6
150°	1195.6	1200.0	1200.0	1200.0	1198.9
152.5°	1233.5	1235.8	1236.9	1240.2	1236.9
155°	1272.6	1272.6	1271.5	1276.0	1271.5
157.5°	1306.1	1303.9	1303.9	1307.2	1303.9
160°	1335.1	1334.0	1332.9	1336.2	1330.7
162.5°	1361.9	1358.6	1357.4	1364.1	1358.6
165°	1385.4	1382.0	1379.8	1386.5	1382.0
167.5°	1404.3	1399.9	1399.9	1406.6	1399.9
170°	1420.0	1414.4	1415.5	1422.2	1414.4
172.5°	1431.1	1426.7	1426.7	1434.5	1426.7
175°	1441.2	1435.6	1434.5	1442.3	1434.5
177.5°	1445.6	1440.1	1440.1	1447.9	1438.9
180°	1443.4	1443.4	1443.4	1443.4	1443.4

(END OF REPORT)