

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: P1024893

Luminaire Tested: S124DIP-B1020D1205UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024893
REPORT IS A COMBINATION OF REPORTS P995238 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-F4
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

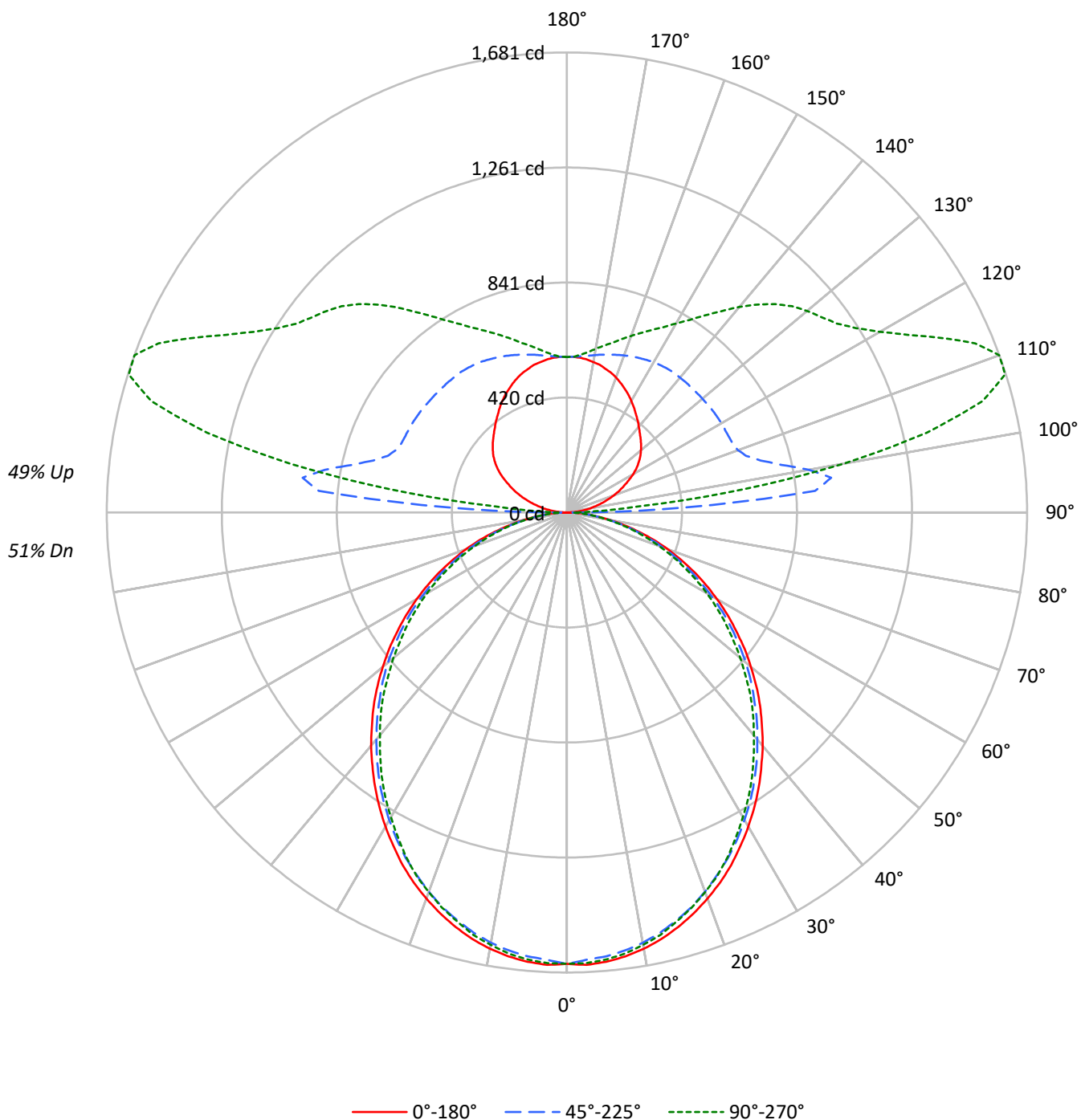
Lumens per Lamp: N/A
Luminaire Lumens: 8383.3 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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
RCR																	
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	98	94	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48
2	89	82	75	70	82	76	70	66	64	60	57	54	51	48	44	42	40
3	81	72	64	59	75	67	60	55	57	52	48	47	44	41	39	36	34
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	35	32	29
5	68	57	48	42	63	53	45	40	45	39	35	38	34	30	31	28	26
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	28	25	23
7	58	46	38	32	54	43	36	30	37	31	27	31	27	24	26	23	20
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18
9	50	38	30	25	46	36	29	24	31	25	21	26	22	19	22	19	16
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	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	5.2
20°-30°	644.5	7.7
30°-40°	749.2	8.9
40°-50°	749.1	8.9
50°-60°	655.2	7.8
60°-70°	486.5	5.8
70°-80°	276.0	3.3
80°-90°	81.2	1.0
90°-100°	422.2	5.0
100°-110°	858.7	10.2
110°-120°	765.4	9.1
120°-130°	642.9	7.7
130°-140°	536.5	6.4
140°-150°	409.8	4.9
150°-160°	288.0	3.4
160°-170°	169.4	2.0
170°-180°	55.1	0.7
0°-30°	1237.9	14.8
0°-40°	1987.1	23.7
0°-60°	3391.5	40.5
0°-90°	4235.2	50.5
90°-120°	2046.3	24.4
90°-150°	3635.6	43.4
90°-180°	4148.0	49.5
0°-180°	8383.3	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°	1	9	20	22	24	7
95°	37	116	910	451	272	40
105°	131	189	732	1577	1571	139
115°	230	289	653	1255	1509	228
125°	320	381	650	1068	1204	286
135°	381	453	644	948	1076	294
145°	439	502	641	800	879	275
155°	499	539	623	706	736	230
165°	544	561	597	633	642	154
175°	567	568	573	581	578	54
180°	568	568	568	568	568	

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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°	1.1	8.9	20.1	22.3	23.5
92.5°	15.6	86.0	437.7	144.6	101.6
95°	36.9	116.2	910.1	450.6	272.5
97.5°	61.4	128.4	973.8	920.2	654.4
100°	84.9	145.2	897.8	1273.0	1024.0
102.5°	107.2	165.2	802.9	1494.2	1345.6
105°	130.7	189.3	732.5	1577.3	1571.2
107.5°	156.3	213.8	686.8	1552.2	1678.4
110°	182.0	238.4	665.5	1462.8	1680.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.6	263.0	655.5	1353.4	1614.7
115°	230.0	288.6	653.3	1255.2	1508.6
117.5°	254.6	312.6	652.1	1178.1	1404.8
120°	279.2	336.2	652.1	1126.2	1319.9
122.5°	301.5	359.0	651.0	1092.1	1252.9
125°	320.5	380.8	649.9	1068.1	1203.8
127.5°	338.4	400.9	647.7	1045.2	1172.5
130°	352.9	420.4	646.6	1017.9	1145.7
132.5°	367.4	437.2	645.4	985.5	1115.6
135°	380.8	453.4	644.3	948.1	1076.5
137.5°	394.2	467.4	644.3	907.9	1030.7
140°	408.7	480.2	643.2	868.8	980.5
142.5°	424.3	491.9	643.2	832.4	926.9
145°	438.9	502.5	641.0	799.6	878.8
147.5°	455.6	512.6	637.6	772.2	834.2
150°	471.2	522.0	634.3	747.0	797.3
152.5°	485.8	531.0	628.7	725.8	763.8
155°	499.2	538.8	623.1	705.7	735.9
157.5°	512.6	546.1	617.5	686.8	710.2
160°	524.8	552.2	610.8	667.8	686.8
162.5°	536.0	557.2	604.1	649.3	664.4
165°	543.8	560.6	597.4	632.6	642.1
167.5°	552.8	563.4	590.7	618.1	624.2
170°	558.3	565.6	584.0	603.6	607.5
172.5°	563.9	567.3	577.3	590.7	590.7
175°	567.3	568.4	572.9	580.7	578.4
177.5°	569.5	568.4	569.5	573.4	569.5
180°	568.4	568.4	568.4	568.4	568.4

(END OF REPORT)