

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: P1024937

Luminaire Tested: S124DIP-B1020D365UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024937
REPORT IS A COMBINATION OF REPORTS P995297 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D365UB50-4F0-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

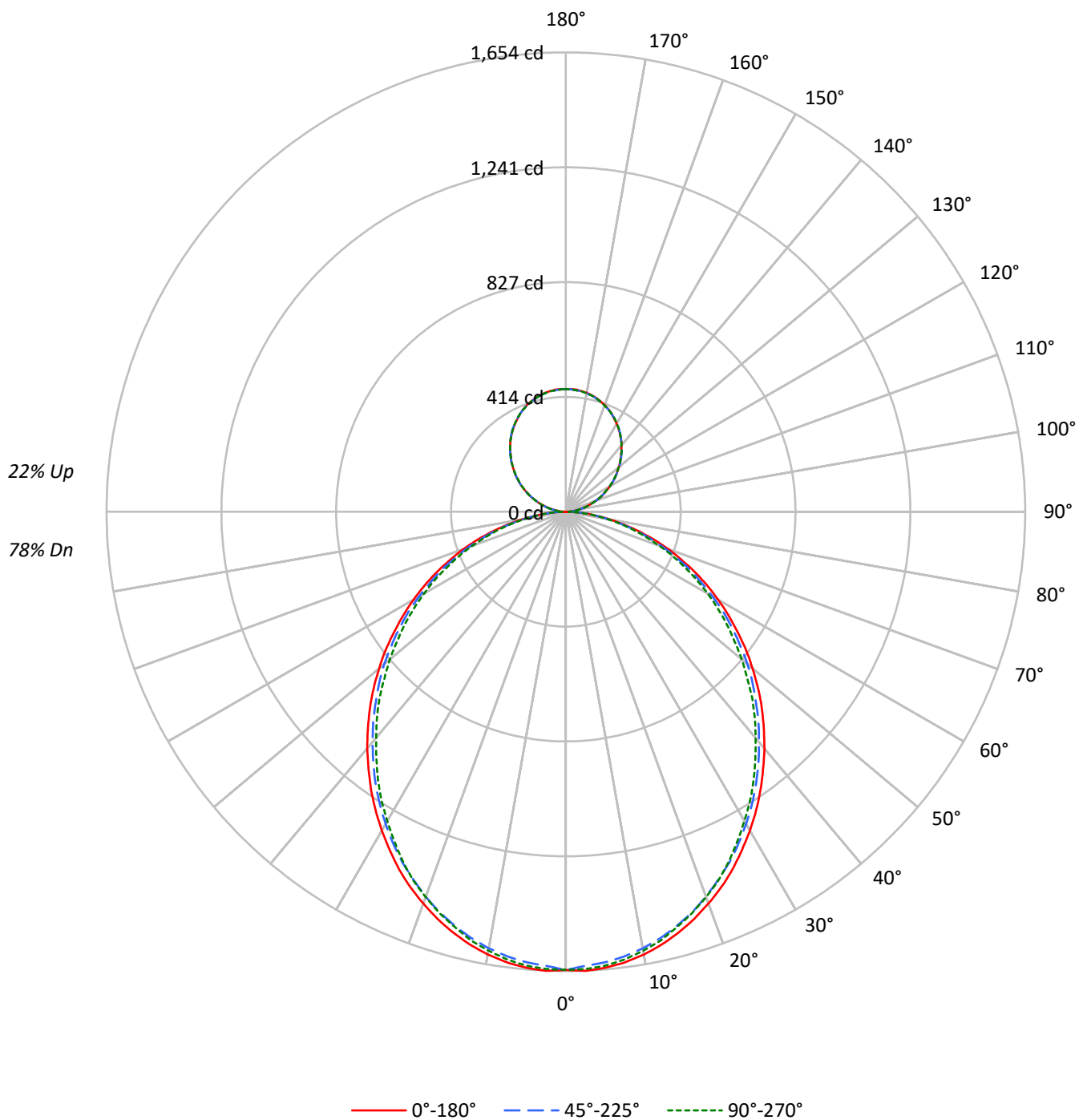
Lumens per Lamp: N/A
Luminaire Lumens: 5460.0 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
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

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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	114	114	114	114	108	108	108	108	99	99	99	90	90	90	81	81	81
1	104	99	95	92	99	95	91	88	87	84	81	79	77	75	72	70	69
2	95	87	80	75	90	83	77	72	76	71	67	69	66	62	63	60	58
3	86	76	69	62	82	73	66	61	67	61	57	61	57	53	56	52	49
4	79	68	59	53	75	65	57	51	60	53	48	55	50	45	50	46	42
5	73	61	52	46	69	58	50	44	54	47	42	49	44	39	45	41	37
6	67	54	46	40	64	52	45	39	48	42	37	45	39	35	41	36	33
7	62	49	41	35	59	48	40	34	44	37	33	41	35	31	38	33	29
8	58	45	37	31	55	43	36	31	40	34	29	37	32	28	35	30	26
9	54	41	33	28	52	40	32	27	37	31	26	34	29	25	32	27	24
10	51	38	30	25	48	37	30	25	34	28	24	32	26	23	30	25	22

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	2.8
10°-20°	437.9	8.0
20°-30°	644.5	11.8
30°-40°	749.2	13.7
40°-50°	749.1	13.7
50°-60°	655.2	12.0
60°-70°	486.5	8.9
70°-80°	276.0	5.1
80°-90°	80.0	1.5
90°-100°	28.8	0.5
100°-110°	86.3	1.6
110°-120°	146.5	2.7
120°-130°	193.3	3.5
130°-140°	217.1	4.0
140°-150°	213.4	3.9
150°-160°	179.5	3.3
160°-170°	119.4	2.2
170°-180°	41.8	0.8
0°-30°	1237.9	22.7
0°-40°	1987.1	36.4
0°-60°	3391.5	62.1
0°-90°	4233.9	77.5
90°-120°	261.6	4.8
90°-150°	885.4	16.2
90°-180°	1226.0	22.5
0°-180°	5460.0	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°	1	5	8	10	10	6
95°	20	24	26	27	27	22
105°	80	80	81	82	83	84
115°	149	149	148	148	148	147
125°	217	217	217	216	215	193
135°	280	282	282	281	280	217
145°	340	341	342	341	340	213
155°	390	390	389	391	389	179
165°	424	423	422	424	423	120
175°	441	440	439	442	439	42
180°	442	442	442	442	442	

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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°	1.0	4.8	7.5	9.6	10.3
92.5°	8.9	13.3	15.0	16.1	16.4
95°	20.5	23.6	26.0	27.0	27.0
97.5°	32.8	35.5	38.3	39.6	39.6
100°	47.8	49.2	52.3	53.0	53.0
102.5°	63.6	63.9	66.6	67.7	68.0
105°	79.6	80.0	81.3	82.4	83.4
107.5°	96.4	96.7	97.1	98.4	98.1
110°	113.5	114.1	113.8	113.1	114.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	131.2	131.2	130.5	130.5	130.5
115°	149.0	149.0	148.3	148.0	147.6
117.5°	165.7	165.7	165.4	164.4	163.4
120°	182.5	183.9	182.8	181.1	181.8
122.5°	199.9	200.3	199.9	198.9	197.2
125°	217.0	217.0	216.7	216.0	215.3
127.5°	232.4	233.4	232.7	232.0	231.7
130°	248.8	249.8	249.8	249.1	247.8
132.5°	265.5	266.2	265.9	265.2	264.9
135°	279.9	281.9	281.9	281.3	280.2
137.5°	296.0	297.0	297.7	296.6	297.0
140°	312.0	312.7	312.7	312.4	312.0
142.5°	326.7	327.4	327.1	327.1	327.1
145°	340.0	341.4	341.7	341.4	340.4
147.5°	353.7	355.4	355.1	354.7	354.4
150°	366.0	367.4	367.4	367.4	367.0
152.5°	377.6	378.3	378.7	379.7	378.7
155°	389.6	389.6	389.3	390.6	389.3
157.5°	399.8	399.2	399.2	400.2	399.2
160°	408.7	408.4	408.0	409.1	407.4
162.5°	416.9	415.9	415.6	417.6	415.9
165°	424.1	423.1	422.4	424.5	423.1
167.5°	429.9	428.6	428.6	430.6	428.6
170°	434.7	433.0	433.3	435.4	433.0
172.5°	438.1	436.8	436.8	439.1	436.8
175°	441.2	439.5	439.1	441.5	439.1
177.5°	442.6	440.9	440.9	443.2	440.5
180°	441.9	441.9	441.9	441.9	441.9

(END OF REPORT)