

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: P1024936

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024936
REPORT IS A COMBINATION OF REPORTS P995296 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-F
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

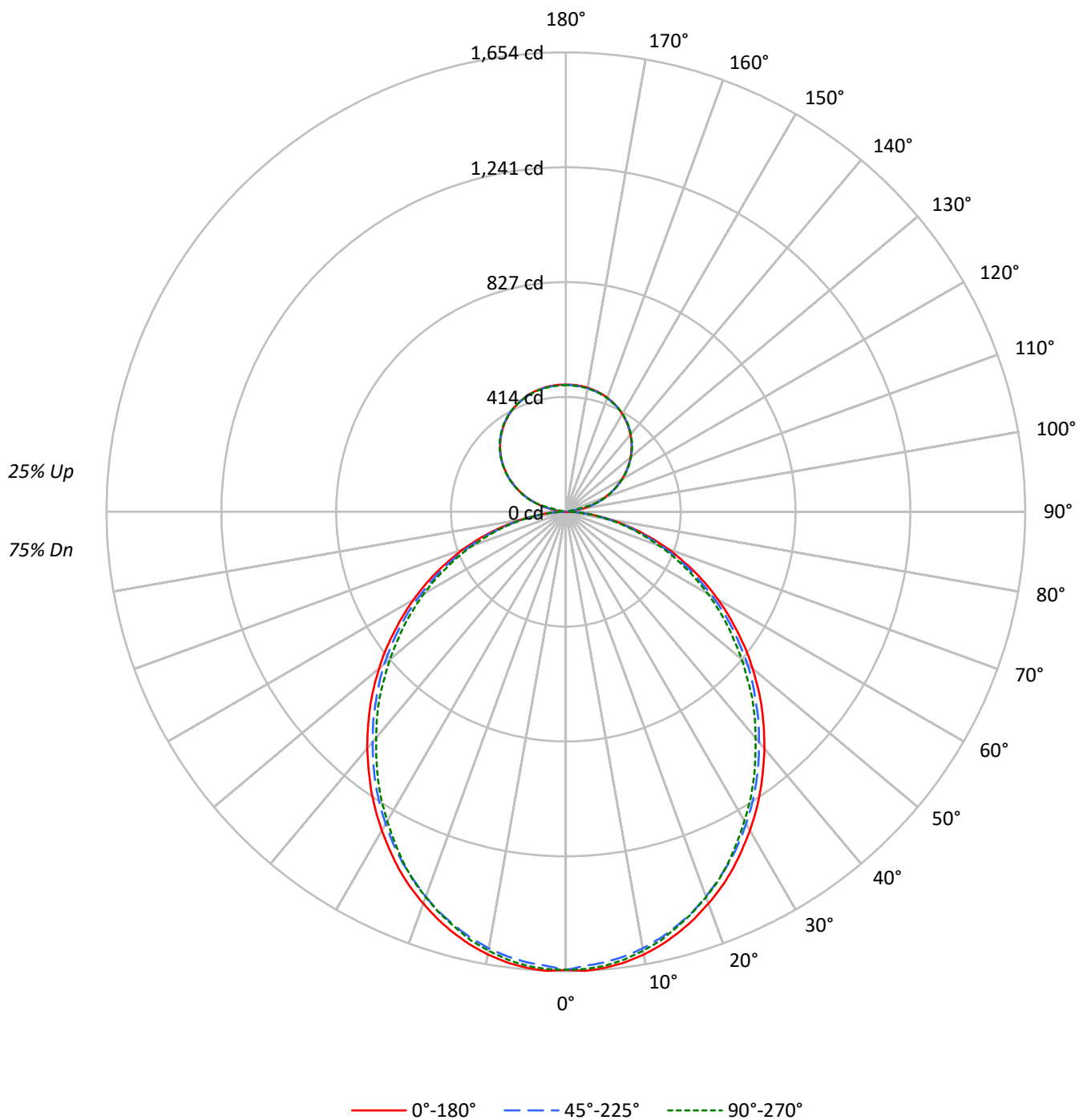
Lumens per Lamp: N/A
Luminaire Lumens: 5648.0 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79
1	103	99	95	91	98	94	91	87	85	83	80	77	75	73	70	68	67
2	94	86	80	74	89	82	77	72	75	70	66	68	64	61	61	59	56
3	86	76	68	62	81	73	66	60	66	60	56	60	56	52	54	51	48
4	79	67	59	53	75	64	57	51	59	53	48	54	49	44	49	45	41
5	72	60	52	45	69	58	50	44	53	46	41	48	43	39	44	40	36
6	67	54	46	40	63	52	44	38	48	41	36	44	38	34	40	35	32
7	62	49	41	35	59	47	39	34	43	37	32	40	34	30	36	32	28
8	58	45	37	31	55	43	35	30	40	33	29	36	31	27	34	29	25
9	54	41	33	28	51	39	32	27	36	30	26	34	28	24	31	26	23
10	50	38	30	25	48	36	29	25	34	28	23	31	26	22	29	24	21

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	7.8
20°-30°	644.5	11.4
30°-40°	749.2	13.3
40°-50°	749.1	13.3
50°-60°	655.2	11.6
60°-70°	486.5	8.6
70°-80°	276.0	4.9
80°-90°	80.0	1.4
90°-100°	15.2	0.3
100°-110°	99.9	1.8
110°-120°	190.8	3.4
120°-130°	242.2	4.3
130°-140°	259.1	4.6
140°-150°	242.2	4.3
150°-160°	195.4	3.5
160°-170°	126.0	2.2
170°-180°	43.4	0.8
0°-30°	1237.9	21.9
0°-40°	1987.1	35.2
0°-60°	3391.5	60.0
0°-90°	4233.9	75.0
90°-120°	305.8	5.4
90°-150°	1049.3	18.6
90°-180°	1414.0	25.0
0°-180°	5648.0	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°	19	7	8	10	10	23
105°	103	105	107	110	97	108
115°	192	193	193	194	194	189
125°	270	271	271	272	272	241
135°	335	335	336	337	337	258
145°	386	387	387	388	388	241
155°	424	424	423	424	423	195
165°	447	445	445	448	445	126
175°	457	455	455	458	454	44
180°	457	457	457	457	457	

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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°	5.1	4.4	7.2	9.2	9.2
95°	18.8	7.2	7.5	9.6	9.9
97.5°	35.9	43.4	7.5	9.2	9.6
100°	56.1	62.2	15.0	9.2	9.6
102.5°	78.6	82.7	86.8	9.9	9.9
105°	102.9	104.9	106.6	109.7	97.4
107.5°	125.1	126.1	128.5	130.2	131.6
110°	147.7	148.7	150.7	151.4	152.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	169.5	171.6	172.3	171.9	173.3
115°	192.1	193.1	192.8	193.5	193.5
117.5°	212.3	213.6	214.6	214.3	214.3
120°	232.8	234.1	233.8	234.5	233.8
122.5°	251.9	252.6	253.3	253.6	252.9
125°	270.0	271.4	270.7	271.7	272.1
127.5°	287.4	287.8	289.5	289.2	288.8
130°	304.2	304.5	305.6	305.9	305.9
132.5°	319.6	320.3	321.6	322.0	321.6
135°	335.0	334.6	336.0	336.7	337.4
137.5°	348.6	348.6	350.3	351.0	350.7
140°	362.0	362.6	363.3	364.4	364.7
142.5°	373.9	375.3	375.6	376.3	376.3
145°	386.2	387.3	387.3	387.6	388.3
147.5°	395.8	397.8	397.5	397.8	398.2
150°	406.4	407.8	407.4	407.4	407.8
152.5°	415.3	416.3	415.6	416.3	416.0
155°	423.5	423.8	422.8	424.2	423.1
157.5°	430.7	430.7	429.3	431.0	429.3
160°	436.8	435.8	435.4	437.5	435.4
162.5°	442.3	440.9	440.6	442.6	440.2
165°	446.7	445.0	445.0	447.8	444.7
167.5°	450.5	448.8	448.4	451.5	448.1
170°	453.6	451.5	451.9	454.6	451.2
172.5°	455.6	453.6	453.9	456.6	452.9
175°	457.0	454.9	455.3	458.3	454.2
177.5°	458.0	455.6	456.3	459.0	454.9
180°	457.0	457.0	457.0	457.0	457.0

(END OF REPORT)