

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: P1024938

Luminaire Tested: S124DIP-B1020D365UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024938
REPORT IS A COMBINATION OF REPORTS P995298 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-F4
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

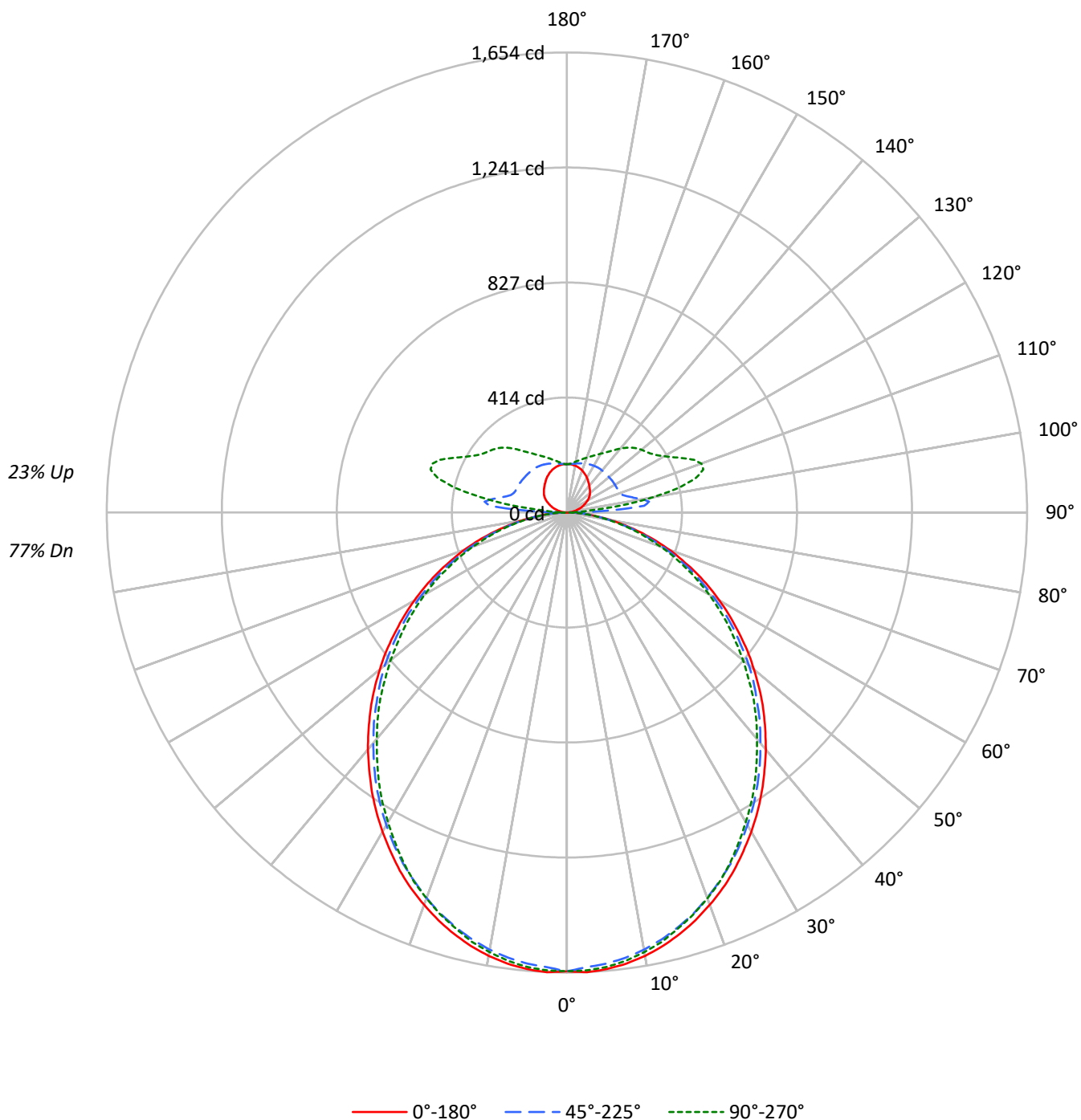
Lumens per Lamp: N/A
Luminaire Lumens: 5503.5 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	98	98	98	89	89	89	81	81	81
1	104	99	95	91	99	95	91	88	86	83	81	79	76	74	71	70	68
2	95	87	80	75	90	83	77	72	76	71	67	69	65	62	63	60	57
3	86	76	69	62	82	73	66	60	67	61	56	61	56	53	56	52	49
4	79	68	59	53	75	65	57	51	59	53	48	54	49	45	50	46	42
5	73	60	52	46	69	58	50	44	53	47	42	49	44	39	45	40	37
6	67	54	46	40	64	52	44	39	48	42	37	44	39	35	41	36	32
7	62	49	41	35	59	47	40	34	44	37	32	40	35	31	37	33	29
8	58	45	37	31	55	43	36	30	40	34	29	37	32	27	34	30	26
9	54	41	33	28	51	40	32	27	37	31	26	34	29	25	32	27	23
10	51	38	30	25	48	37	30	25	34	28	24	32	26	22	29	25	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	8.0
20°-30°	644.5	11.7
30°-40°	749.2	13.6
40°-50°	749.1	13.6
50°-60°	655.2	11.9
60°-70°	486.5	8.8
70°-80°	276.0	5.0
80°-90°	79.7	1.4
90°-100°	129.3	2.3
100°-110°	262.9	4.8
110°-120°	234.3	4.3
120°-130°	196.8	3.6
130°-140°	164.2	3.0
140°-150°	125.4	2.3
150°-160°	88.2	1.6
160°-170°	51.9	0.9
170°-180°	16.9	0.3
0°-30°	1237.9	22.5
0°-40°	1987.1	36.1
0°-60°	3391.5	61.6
0°-90°	4233.7	76.9
90°-120°	626.5	11.4
90°-150°	1113.0	20.2
90°-180°	1270.0	23.1
0°-180°	5503.5	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°	0	3	6	7	7	5
95°	11	36	279	138	83	12
105°	40	58	224	483	481	43
115°	70	88	200	384	462	70
125°	98	117	199	327	368	87
135°	117	139	197	290	330	90
145°	134	154	196	245	269	84
155°	153	165	191	216	225	70
165°	166	172	183	194	197	47
175°	174	174	175	178	177	16
180°	174	174	174	174	174	

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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°	0.3	2.7	6.2	6.8	7.2
92.5°	4.8	26.4	134.0	44.2	31.1
95°	11.3	35.6	278.6	138.0	83.4
97.5°	18.8	39.4	298.1	281.6	200.3
100°	26.0	44.4	274.9	389.8	313.5
102.5°	32.8	50.6	245.8	457.4	411.9
105°	40.0	58.0	224.3	482.9	481.0
107.5°	47.9	65.4	210.2	475.2	513.8
110°	55.7	73.0	203.7	447.8	514.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	63.2	80.5	200.7	414.3	494.3
115°	70.4	88.4	200.0	384.2	461.8
117.5°	77.9	95.7	199.6	360.6	430.1
120°	85.5	102.9	199.6	344.8	404.1
122.5°	92.3	109.9	199.3	334.4	383.6
125°	98.1	116.6	199.0	327.0	368.5
127.5°	103.6	122.7	198.3	320.0	358.9
130°	108.0	128.8	197.9	311.6	350.7
132.5°	112.5	133.8	197.6	301.6	341.5
135°	116.6	138.8	197.3	290.2	329.5
137.5°	120.7	143.0	197.3	278.0	315.5
140°	125.1	147.0	196.9	266.0	300.1
142.5°	129.9	150.6	196.9	254.8	283.7
145°	134.3	153.8	196.2	244.8	269.0
147.5°	139.5	156.9	195.2	236.4	255.4
150°	144.3	159.8	194.2	228.7	244.1
152.5°	148.7	162.6	192.5	222.2	233.8
155°	152.8	165.0	190.8	216.0	225.3
157.5°	156.9	167.1	189.0	210.2	217.4
160°	160.7	169.0	187.0	204.4	210.2
162.5°	164.1	170.6	184.9	198.8	203.4
165°	166.5	171.6	182.9	193.6	196.6
167.5°	169.2	172.4	180.8	189.2	191.1
170°	170.9	173.1	178.8	184.8	186.0
172.5°	172.6	173.6	176.7	180.8	180.8
175°	173.7	174.0	175.4	177.8	177.1
177.5°	174.3	174.0	174.3	175.6	174.3
180°	174.0	174.0	174.0	174.0	174.0

(END OF REPORT)