

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: P1024928

Luminaire Tested: S124DIP-B1020D365UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024928
REPORT IS A COMBINATION OF REPORTS P995288 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D365UB40-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

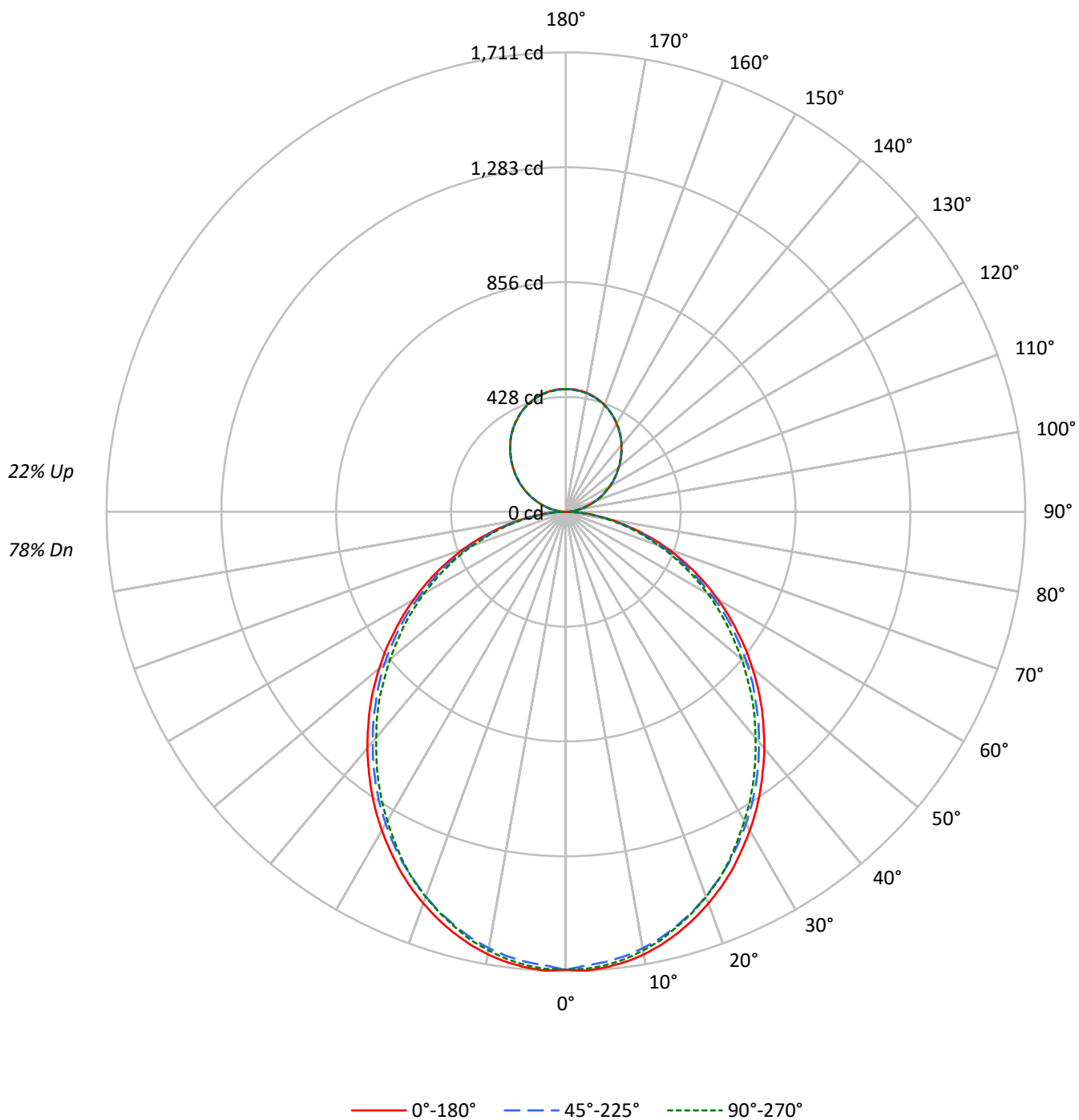
Lumens per Lamp: N/A
Luminaire Lumens: 5646.0 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	60	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°	13906	13906	13906
5°	13917	13506	13522
10°	13800	13130	13039
15°	13602	12685	12494
20°	13349	12203	11929
25°	13064	11693	11321
30°	12721	11142	10654
35°	12365	10579	10010
40°	11995	9972	9324
45°	11608	9363	8683
50°	11177	8773	7973
55°	10710	8084	7267
60°	10231	7329	6533
65°	9684	6550	5705
70°	9053	5611	4818
75°	8112	4522	3859
80°	6914	3269	2714
85°	5370	1822	1461

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11608 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.7	2.8
10°-20°	452.8	8.0
20°-30°	666.4	11.8
30°-40°	774.7	13.7
40°-50°	774.6	13.7
50°-60°	677.5	12.0
60°-70°	503.0	8.9
70°-80°	285.4	5.1
80°-90°	82.7	1.5
90°-100°	29.8	0.5
100°-110°	89.2	1.6
110°-120°	151.6	2.7
120°-130°	199.9	3.5
130°-140°	224.5	4.0
140°-150°	220.7	3.9
150°-160°	185.6	3.3
160°-170°	123.5	2.2
170°-180°	43.2	0.8
0°-30°	1280.0	22.7
0°-40°	2054.7	36.4
0°-60°	3506.8	62.1
0°-90°	4378.0	77.5
90°-120°	270.6	4.8
90°-150°	915.7	16.2
90°-180°	1268.0	22.5
0°-180°	5646.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1705	1705	1705	1705	1705	
5°	1704	1698	1683	1698	1696	162
15°	1622	1616	1596	1604	1600	457
25°	1469	1459	1440	1442	1436	676
35°	1264	1254	1235	1226	1219	790
45°	1032	1022	1000	985	981	795
55°	780	776	757	741	732	699
65°	529	522	508	495	488	523
75°	282	275	268	262	261	299
85°	74	74	71	71	70	79
90°	1	5	8	10	11	6
95°	21	24	27	28	28	23
105°	82	83	84	85	86	87
115°	154	154	153	153	153	152
125°	224	224	224	223	223	200
135°	290	292	292	291	290	224
145°	352	353	353	353	352	220
155°	403	403	403	404	403	185
165°	439	438	437	439	438	124
175°	456	454	454	457	454	43
180°	457	457	457	457	457	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1705.3	1705.3	1705.3	1705.3	1705.3
2.5°	1710.8	1706.7	1691.6	1705.3	1703.9
5°	1703.9	1698.5	1683.4	1698.5	1695.7
7.5°	1691.6	1686.2	1669.8	1682.1	1680.7
10°	1673.9	1668.4	1650.6	1661.6	1658.8
12.5°	1650.6	1645.2	1626.1	1638.4	1634.3
15°	1622.0	1616.5	1596.0	1604.2	1600.1
17.5°	1589.2	1582.3	1563.2	1568.7	1565.9
20°	1552.3	1545.4	1524.9	1529.0	1526.3
22.5°	1512.6	1503.1	1482.6	1490.8	1485.3
25°	1468.9	1459.3	1440.2	1441.6	1436.1
27.5°	1419.7	1410.2	1392.4	1389.7	1382.8
30°	1370.5	1359.6	1341.8	1336.4	1329.5
32.5°	1318.6	1309.0	1289.9	1283.1	1276.2
35°	1263.9	1254.4	1235.3	1225.7	1218.9
37.5°	1206.6	1198.4	1177.9	1168.3	1158.7
40°	1150.5	1139.6	1119.1	1105.4	1098.6
42.5°	1090.4	1084.9	1061.7	1045.3	1041.2
45°	1031.7	1022.1	1000.2	985.2	981.1
47.5°	970.2	963.3	942.8	926.4	915.5
50°	907.3	901.8	882.7	863.6	855.4
52.5°	845.8	839.0	818.5	802.1	791.2
55°	780.2	776.1	757.0	740.6	732.4
57.5°	718.7	714.6	695.5	679.1	670.9
60°	654.5	647.7	629.9	617.6	610.8
62.5°	591.7	586.2	567.1	556.1	549.3
65°	528.8	522.0	508.3	494.6	487.8
67.5°	464.6	459.1	445.5	431.8	430.4
70°	405.8	396.3	385.3	374.4	370.3
72.5°	343.0	333.4	325.2	317.0	312.9
75°	281.5	274.7	267.8	262.4	261.0
77.5°	221.4	218.6	211.8	210.4	206.3
80°	168.1	164.0	161.2	158.5	157.1
82.5°	116.1	114.8	114.8	113.4	112.0
85°	73.8	73.8	71.1	71.1	69.7
87.5°	35.5	34.2	32.8	32.8	32.8
90°	1.1	4.9	7.8	9.9	10.6
92.5°	9.2	13.8	15.6	16.6	17.0
95°	21.2	24.4	26.9	27.9	27.9
97.5°	33.9	36.8	39.6	41.0	41.0
100°	49.5	50.9	54.1	54.8	54.8
102.5°	65.7	66.1	68.9	70.0	70.3
105°	82.4	82.7	84.1	85.2	86.2
107.5°	99.7	100.0	100.4	101.8	101.4
110°	117.3	118.1	117.7	117.0	118.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	135.7	135.7	135.0	135.0	135.0
115°	154.1	154.1	153.4	153.0	152.7
117.5°	171.4	171.4	171.1	170.0	168.9
120°	188.7	190.2	189.1	187.3	188.0
122.5°	206.8	207.1	206.8	205.7	203.9
125°	224.4	224.4	224.1	223.4	222.7
127.5°	240.3	241.4	240.7	240.0	239.6
130°	257.3	258.4	258.4	257.7	256.2
132.5°	274.6	275.3	275.0	274.3	273.9
135°	289.5	291.6	291.6	290.9	289.8
137.5°	306.1	307.1	307.9	306.8	307.1
140°	322.7	323.4	323.4	323.0	322.7
142.5°	337.9	338.6	338.2	338.2	338.2
145°	351.7	353.1	353.4	353.1	352.0
147.5°	365.8	367.6	367.2	366.9	366.5
150°	378.5	380.0	380.0	380.0	379.6
152.5°	390.6	391.3	391.6	392.7	391.6
155°	402.9	402.9	402.6	404.0	402.6
157.5°	413.5	412.8	412.8	413.9	412.8
160°	422.7	422.4	422.0	423.1	421.3
162.5°	431.2	430.1	429.8	431.9	430.1
165°	438.6	437.6	436.9	439.0	437.6
167.5°	444.6	443.2	443.2	445.3	443.2
170°	449.6	447.8	448.2	450.3	447.8
172.5°	453.1	451.7	451.7	454.2	451.7
175°	456.3	454.5	454.2	456.7	454.2
177.5°	457.7	455.9	455.9	458.4	455.6
180°	457.0	457.0	457.0	457.0	457.0

(END OF REPORT)