

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: P1024927

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024927
REPORT IS A COMBINATION OF REPORTS P995287 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-F
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

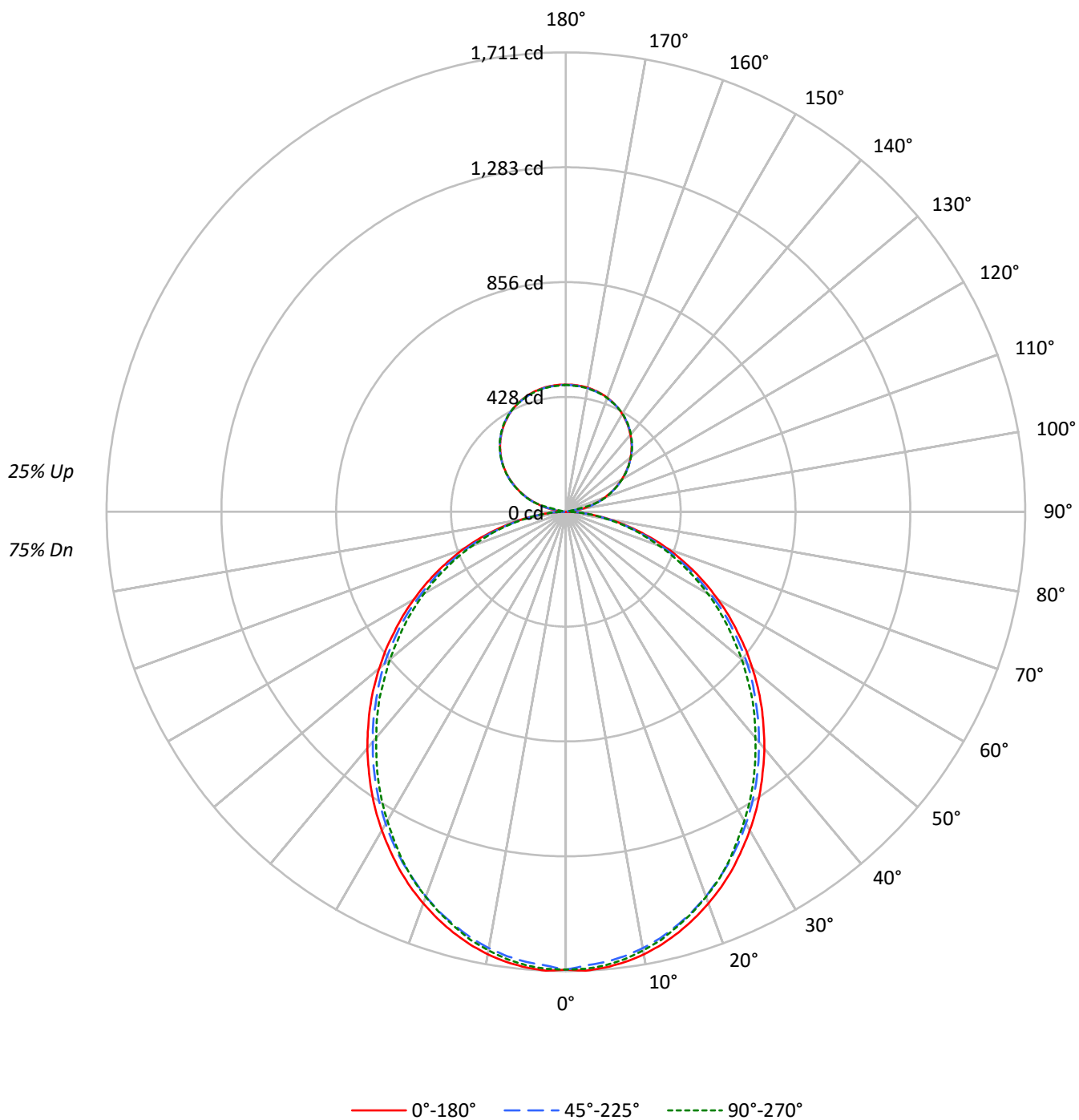
Lumens per Lamp: N/A
Luminaire Lumens: 5841.0 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	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	48	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°	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	7.8
20°-30°	666.4	11.4
30°-40°	774.7	13.3
40°-50°	774.6	13.3
50°-60°	677.5	11.6
60°-70°	503.0	8.6
70°-80°	285.4	4.9
80°-90°	82.7	1.4
90°-100°	15.7	0.3
100°-110°	103.4	1.8
110°-120°	197.4	3.4
120°-130°	250.5	4.3
130°-140°	268.0	4.6
140°-150°	250.6	4.3
150°-160°	202.1	3.5
160°-170°	130.3	2.2
170°-180°	44.9	0.8
0°-30°	1280.0	21.9
0°-40°	2054.7	35.2
0°-60°	3506.8	60.0
0°-90°	4378.0	75.0
90°-120°	316.4	5.4
90°-150°	1085.6	18.6
90°-180°	1463.0	25.0
0°-180°	5841.0	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°	19	7	8	10	10	24
105°	106	109	110	114	101	111
115°	199	200	199	200	200	196
125°	279	281	280	281	282	249
135°	347	346	348	348	349	267
145°	400	401	401	401	402	250
155°	438	438	437	439	438	202
165°	462	460	460	463	460	131
175°	473	471	471	474	470	45
180°	473	473	473	473	473	

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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	5.0	7.8	9.9	10.6
92.5°	5.3	4.6	7.4	9.5	9.5
95°	19.4	7.4	7.8	9.9	10.3
97.5°	37.1	44.9	7.8	9.5	9.9
100°	58.0	64.4	15.6	9.5	9.9
102.5°	81.3	85.6	89.8	10.3	10.3
105°	106.4	108.6	110.3	113.5	100.8
107.5°	129.4	130.5	133.0	134.7	136.1
110°	152.8	153.8	156.0	156.7	157.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.4	177.5	178.2	177.9	179.3
115°	198.7	199.8	199.4	200.2	200.2
117.5°	219.6	221.0	222.1	221.7	221.7
120°	240.8	242.2	241.9	242.6	241.9
122.5°	260.6	261.3	262.0	262.4	261.7
125°	279.4	280.8	280.1	281.1	281.5
127.5°	297.4	297.8	299.5	299.2	298.8
130°	314.7	315.1	316.1	316.5	316.5
132.5°	330.6	331.4	332.8	333.1	332.8
135°	346.6	346.2	347.6	348.3	349.0
137.5°	360.7	360.7	362.5	363.2	362.8
140°	374.5	375.2	375.9	377.0	377.3
142.5°	386.9	388.3	388.6	389.3	389.3
145°	399.6	400.7	400.7	401.0	401.7
147.5°	409.5	411.6	411.3	411.6	412.0
150°	420.5	421.9	421.5	421.5	421.9
152.5°	429.7	430.7	430.0	430.7	430.4
155°	438.1	438.5	437.4	438.9	437.8
157.5°	445.6	445.6	444.2	445.9	444.2
160°	451.9	450.9	450.5	452.6	450.5
162.5°	457.6	456.2	455.8	458.0	455.5
165°	462.2	460.4	460.4	463.3	460.1
167.5°	466.1	464.3	464.0	467.1	463.6
170°	469.3	467.1	467.5	470.3	466.8
172.5°	471.4	469.3	469.6	472.5	468.6
175°	472.8	470.7	471.0	474.2	470.0
177.5°	473.9	471.4	472.1	474.9	470.7
180°	472.8	472.8	472.8	472.8	472.8

(END OF REPORT)