

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: P1024929

Luminaire Tested: S124DIP-B1020D365UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024929
REPORT IS A COMBINATION OF REPORTS P995289 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-F4
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

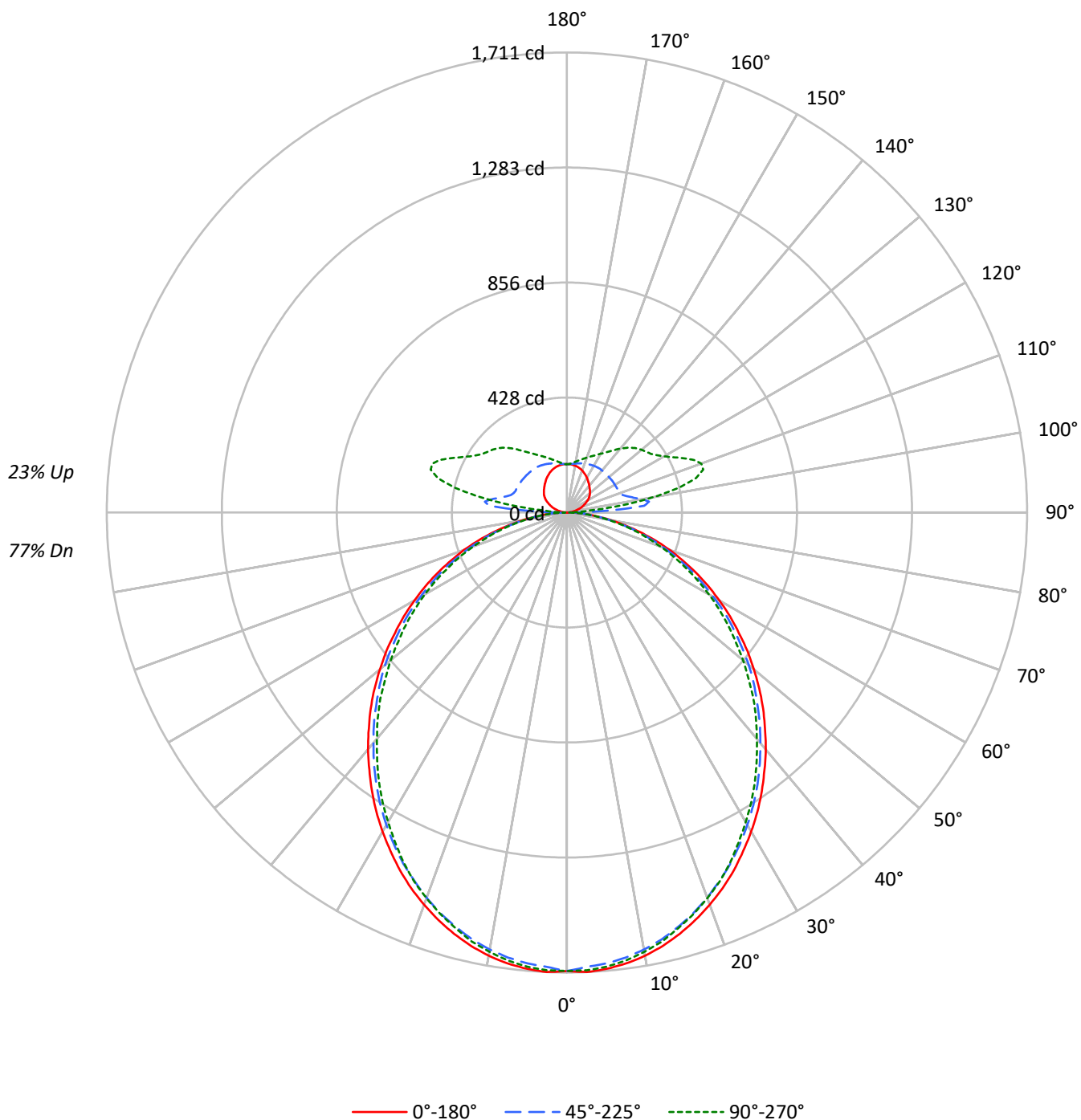
Lumens per Lamp: N/A
Luminaire Lumens: 5690.6 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	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	11.7
30°-40°	774.7	13.6
40°-50°	774.6	13.6
50°-60°	677.5	11.9
60°-70°	503.0	8.8
70°-80°	285.4	5.0
80°-90°	82.4	1.4
90°-100°	133.6	2.3
100°-110°	271.8	4.8
110°-120°	242.3	4.3
120°-130°	203.5	3.6
130°-140°	169.8	3.0
140°-150°	129.7	2.3
150°-160°	91.2	1.6
160°-170°	53.6	0.9
170°-180°	17.4	0.3
0°-30°	1280.0	22.5
0°-40°	2054.7	36.1
0°-60°	3506.8	61.6
0°-90°	4377.7	76.9
90°-120°	647.7	11.4
90°-150°	1150.7	20.2
90°-180°	1313.0	23.1
0°-180°	5690.6	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°	0	3	6	7	7	6
95°	12	37	288	143	86	13
105°	41	60	232	499	497	44
115°	73	91	207	397	478	72
125°	101	121	206	338	381	90
135°	120	144	204	300	341	93
145°	139	159	203	253	278	87
155°	158	171	197	223	233	73
165°	172	177	189	200	203	49
175°	180	180	181	184	183	17
180°	180	180	180	180	180	

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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°	0.4	2.8	6.4	7.1	7.4
92.5°	4.9	27.2	138.6	45.8	32.2
95°	11.7	36.8	288.1	142.6	86.2
97.5°	19.4	40.6	308.2	291.2	207.1
100°	26.9	46.0	284.2	403.0	324.1
102.5°	33.9	52.3	254.1	472.9	425.9
105°	41.4	59.9	231.9	499.2	497.3
107.5°	49.5	67.7	217.4	491.2	531.2
110°	57.6	75.4	210.7	463.0	531.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	65.4	83.2	207.5	428.4	511.1
115°	72.8	91.4	206.8	397.2	477.5
117.5°	80.6	99.0	206.4	372.8	444.6
120°	88.4	106.4	206.4	356.4	417.8
122.5°	95.4	113.6	206.1	345.7	396.6
125°	101.4	120.6	205.7	338.1	381.0
127.5°	107.1	126.8	205.0	330.8	371.1
130°	111.7	133.0	204.6	322.2	362.6
132.5°	116.3	138.4	204.3	312.0	353.1
135°	120.5	143.5	203.9	300.0	340.7
137.5°	124.8	147.9	203.9	287.4	326.2
140°	129.4	152.0	203.6	275.0	310.3
142.5°	134.3	155.7	203.6	263.5	293.4
145°	138.9	159.0	202.9	253.0	278.2
147.5°	144.2	162.2	201.8	244.4	264.0
150°	149.2	165.2	200.8	236.4	252.4
152.5°	153.7	168.1	199.0	229.8	241.8
155°	158.0	170.6	197.2	223.4	232.9
157.5°	162.2	172.8	195.5	217.4	224.8
160°	166.1	174.8	193.3	211.4	217.4
162.5°	169.7	176.4	191.2	205.6	210.3
165°	172.1	177.4	189.1	200.2	203.2
167.5°	175.0	178.3	187.0	195.6	197.6
170°	176.7	179.0	184.9	191.0	192.3
172.5°	178.5	179.6	182.7	187.0	187.0
175°	179.6	179.9	181.3	183.8	183.1
177.5°	180.3	179.9	180.3	181.5	180.3
180°	179.9	179.9	179.9	179.9	179.9

(END OF REPORT)