

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: P1024866

Luminaire Tested: S124DIP-B1020D1205UB30-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024866
REPORT IS A COMBINATION OF REPORTS P995211 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1205UB30-4F0-XX-W2A-F4
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

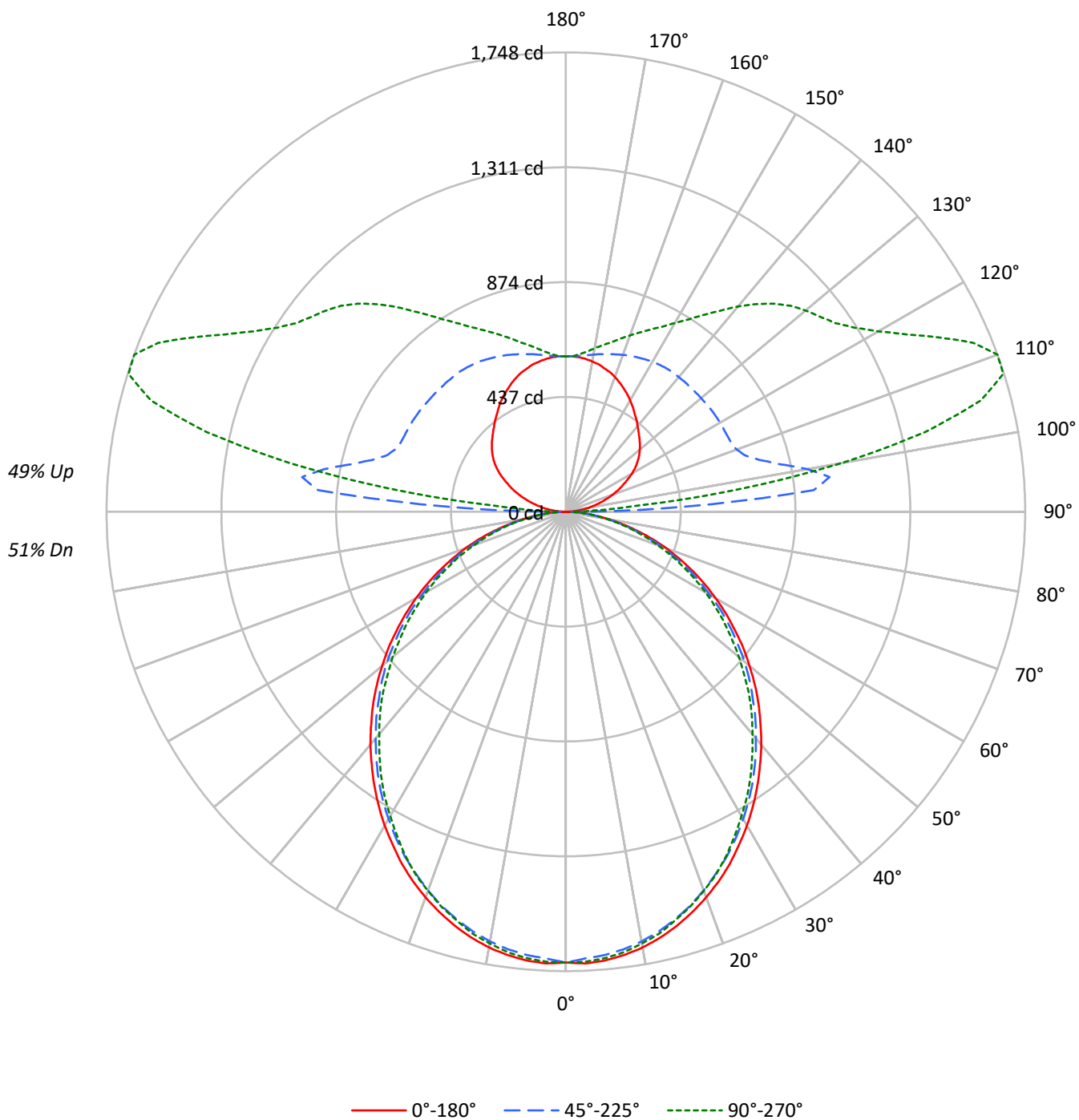
Lumens per Lamp: N/A
Luminaire Lumens: 8717.6 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 81.8
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	98	94	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48
2	89	82	75	70	82	76	70	66	64	60	57	54	51	48	44	42	40
3	81	72	64	59	75	67	60	55	57	52	48	47	44	41	39	36	34
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	35	32	29
5	68	57	48	42	63	53	45	40	45	39	35	38	34	30	31	28	26
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	28	25	23
7	58	46	38	32	54	43	36	30	37	31	27	31	27	24	26	23	20
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18
9	50	38	30	25	46	36	29	24	31	25	21	26	22	19	22	19	16
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13985	13985	13985
5°	13997	13583	13599
10°	13878	13206	13113
15°	13679	12758	12565
20°	13425	12272	11997
25°	13139	11760	11386
30°	12794	11206	10715
35°	12437	10639	10067
40°	12064	10029	9377
45°	11673	9416	8733
50°	11241	8824	8018
55°	10771	8130	7309
60°	10291	7371	6570
65°	9739	6587	5738
70°	9105	5643	4845
75°	8158	4550	3881
80°	6951	3290	2729
85°	5399	1832	1469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11673 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.6	1.9
10°-20°	455.4	5.2
20°-30°	670.3	7.7
30°-40°	779.1	8.9
40°-50°	779.0	8.9
50°-60°	681.4	7.8
60°-70°	505.9	5.8
70°-80°	287.0	3.3
80°-90°	84.5	1.0
90°-100°	439.0	5.0
100°-110°	893.0	10.2
110°-120°	795.9	9.1
120°-130°	668.6	7.7
130°-140°	557.9	6.4
140°-150°	426.1	4.9
150°-160°	299.5	3.4
160°-170°	176.2	2.0
170°-180°	57.3	0.7
0°-30°	1287.3	14.8
0°-40°	2066.5	23.7
0°-60°	3526.9	40.5
0°-90°	4404.3	50.5
90°-120°	2127.9	24.4
90°-150°	3780.4	43.4
90°-180°	4313.0	49.5
0°-180°	8717.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1715	1715	1715	1715	1715	
5°	1714	1708	1693	1708	1705	163
15°	1631	1626	1605	1613	1609	460
25°	1477	1468	1448	1450	1444	680
35°	1271	1262	1242	1233	1226	795
45°	1038	1028	1006	991	987	800
55°	785	781	761	745	737	703
65°	532	525	511	498	491	526
75°	283	276	269	264	262	300
85°	74	74	72	72	70	80
90°	1	9	21	23	24	7
95°	38	121	946	469	283	42
105°	136	197	762	1640	1634	145
115°	239	300	679	1305	1569	237
125°	333	396	676	1111	1252	297
135°	396	471	670	986	1119	306
145°	456	523	666	831	914	286
155°	519	560	648	734	765	239
165°	566	583	621	658	668	160
175°	590	591	596	604	602	56
180°	591	591	591	591	591	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1715.0	1715.0	1715.0	1715.0	1715.0
2.5°	1720.5	1716.4	1701.3	1715.0	1713.7
5°	1713.7	1708.2	1693.1	1708.2	1705.4
7.5°	1701.3	1695.8	1679.3	1691.7	1690.3
10°	1683.4	1677.9	1660.1	1671.1	1668.3
12.5°	1660.1	1654.6	1635.3	1647.7	1643.6
15°	1631.2	1625.7	1605.1	1613.4	1609.2
17.5°	1598.2	1591.4	1572.1	1577.6	1574.9
20°	1561.1	1554.3	1533.6	1537.8	1535.0
22.5°	1521.3	1511.7	1491.0	1499.3	1493.8
25°	1477.3	1467.7	1448.4	1449.8	1444.3
27.5°	1427.8	1418.2	1400.3	1397.6	1390.7
30°	1378.4	1367.4	1349.5	1344.0	1337.1
32.5°	1326.1	1316.5	1297.3	1290.4	1283.5
35°	1271.2	1261.5	1242.3	1232.7	1225.8
37.5°	1213.5	1205.2	1184.6	1175.0	1165.4
40°	1157.1	1146.1	1125.5	1111.8	1104.9
42.5°	1096.6	1091.1	1067.8	1051.3	1047.2
45°	1037.5	1027.9	1005.9	990.8	986.7
47.5°	975.7	968.8	948.2	931.7	920.7
50°	912.5	907.0	887.8	868.5	860.3
52.5°	850.7	843.8	823.2	806.7	795.7
55°	784.7	780.6	761.3	744.8	736.6
57.5°	722.8	718.7	699.5	683.0	674.7
60°	658.3	651.4	633.5	621.2	614.3
62.5°	595.0	589.5	570.3	559.3	552.4
65°	531.8	525.0	511.2	497.5	490.6
67.5°	467.2	461.7	448.0	434.3	432.9
70°	408.1	398.5	387.5	376.5	372.4
72.5°	344.9	335.3	327.1	318.8	314.7
75°	283.1	276.2	269.4	263.9	262.5
77.5°	222.6	219.9	213.0	211.6	207.5
80°	169.0	164.9	162.2	159.4	158.0
82.5°	116.8	115.4	115.4	114.1	112.7
85°	74.2	74.2	71.5	71.5	70.1
87.5°	35.7	34.4	33.0	33.0	33.0
90°	1.2	9.3	20.9	23.2	24.4
92.5°	16.3	89.4	455.2	150.4	105.7
95°	38.3	120.8	946.4	468.6	283.3
97.5°	63.9	133.5	1012.5	956.8	680.4
100°	88.2	151.0	933.6	1323.8	1064.8
102.5°	111.5	171.9	834.9	1553.6	1399.2
105°	135.9	196.8	761.7	1640.2	1633.8
107.5°	162.6	222.4	714.1	1614.0	1745.2
110°	189.3	247.9	692.1	1521.2	1747.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	214.8	273.5	681.6	1407.4	1679.1
115°	239.2	300.2	679.3	1305.2	1568.7
117.5°	264.7	325.2	678.1	1225.0	1460.8
120°	290.3	349.6	678.1	1171.0	1372.5
122.5°	313.5	373.3	677.0	1135.6	1302.8
125°	333.3	396.0	675.8	1110.6	1251.7
127.5°	351.8	416.8	673.5	1086.8	1219.2
130°	366.9	437.2	672.3	1058.4	1191.4
132.5°	382.0	454.6	671.2	1024.8	1160.0
135°	396.0	471.4	670.0	985.8	1119.4
137.5°	409.9	486.0	670.0	944.0	1071.8
140°	425.0	499.3	668.8	903.4	1019.5
142.5°	441.2	511.5	668.8	865.6	963.8
145°	456.3	522.6	666.5	831.4	913.8
147.5°	473.8	533.0	663.0	803.0	867.4
150°	490.0	542.8	659.5	776.8	829.1
152.5°	505.1	552.2	653.7	754.8	794.2
155°	519.0	560.3	647.9	733.8	765.2
157.5°	533.0	567.8	642.1	714.1	738.5
160°	545.8	574.2	635.2	694.4	714.1
162.5°	557.4	579.4	628.2	675.2	690.9
165°	565.5	582.9	621.2	657.8	667.7
167.5°	574.8	585.8	614.3	642.8	649.1
170°	580.6	588.2	607.3	627.6	631.7
172.5°	586.4	589.8	600.3	614.2	614.3
175°	589.9	591.0	595.7	603.8	601.5
177.5°	592.2	591.0	592.2	596.2	592.2
180°	591.0	591.0	591.0	591.0	591.0

(END OF REPORT)