

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: P1024861

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024861
REPORT IS A COMBINATION OF REPORTS P995206 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-D
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

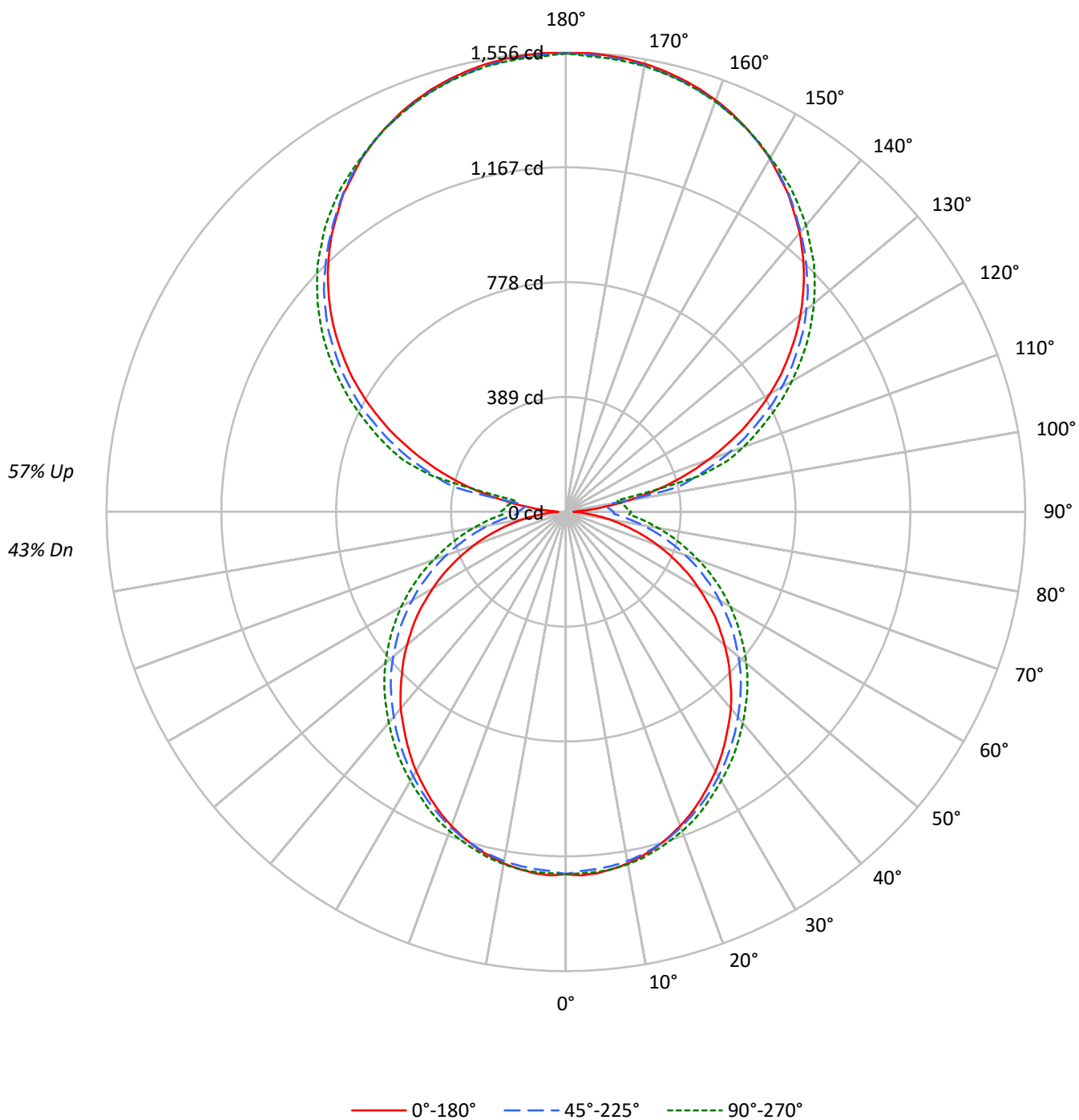
Lumens per Lamp: N/A
Luminaire Lumens: 8991.0 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1024861

CATALOG NUMBER: S124DIP-B1020D1205UB30-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1024861

CATALOG NUMBER: S124DIP-B1020D1205UB30-4F0-XX-W2A-D

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50	43			
1	95	91	87	83	87	83	79	76	68	66	63	55	53	51	43	41	40	34			
2	86	79	72	67	79	72	66	62	59	55	52	48	45	42	37	35	33	28			
3	79	69	61	55	71	63	56	51	52	47	43	42	38	35	32	30	28	23			
4	72	61	53	46	65	56	48	43	46	41	36	37	33	30	29	26	24	20			
5	66	54	46	39	60	49	42	37	41	35	31	33	29	26	26	23	20	17			
6	60	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18	15			
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13			
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	19	16	14	12			
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13	10			
10	45	33	25	21	41	30	24	19	25	20	17	21	17	14	17	14	11	9			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10007	10007	10007
5°	10035	9746	9764
10°	9969	9555	9527
15°	9876	9339	9260
20°	9738	9106	9001
25°	9582	8848	8722
30°	9414	8593	8436
35°	9223	8333	8182
40°	9070	8082	7919
45°	8844	7847	7686
50°	8650	7580	7441
55°	8452	7323	7159
60°	8141	7003	6893
65°	7801	6658	6574
70°	7389	6263	6205
75°	6813	5825	5852
80°	6161	5378	5483
85°	5298	4930	5186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8844 cd/sqm

TEST NUMBER: P1024861

CATALOG NUMBER: S124DIP-B1020D1205UB30-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	1.3
10°-20°	333.2	3.7
20°-30°	503.7	5.6
30°-40°	609.4	6.8
40°-50°	644.3	7.2
50°-60°	606.3	6.7
60°-70°	503.1	5.6
70°-80°	353.1	3.9
80°-90°	202.3	2.2
90°-100°	170.0	1.9
100°-110°	427.1	4.8
110°-120°	706.9	7.9
120°-130°	855.8	9.5
130°-140°	894.4	9.9
140°-150°	825.8	9.2
150°-160°	663.7	7.4
160°-170°	428.0	4.8
170°-180°	147.5	1.6
0°-30°	953.2	10.6
0°-40°	1562.6	17.4
0°-60°	2813.2	31.3
0°-90°	3871.7	43.1
90°-120°	1304.1	14.5
90°-150°	3880.2	43.2
90°-180°	5119.0	56.9
0°-180°	8991.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1227	1227	1227	1227	1227	
5°	1229	1224	1215	1226	1224	117
15°	1178	1179	1175	1187	1186	332
25°	1077	1086	1090	1105	1106	496
35°	943	959	973	992	996	590
45°	786	812	838	862	868	608
55°	616	644	686	713	722	549
65°	426	470	517	551	562	422
75°	236	287	345	383	396	251
85°	73	131	192	234	247	76
90°	26	93	162	208	222	18
95°	82	88	145	189	203	93
105°	362	396	453	498	467	380
115°	661	677	720	752	762	651
125°	923	926	958	988	997	824
135°	1141	1140	1154	1178	1189	879
145°	1314	1316	1316	1325	1333	821
155°	1439	1440	1436	1441	1438	663
165°	1518	1512	1512	1521	1511	429
175°	1552	1546	1547	1557	1543	148
180°	1552	1552	1552	1552	1552	

TEST NUMBER: P1024861

CATALOG NUMBER: S124DIP-B1020D1205UB30-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1227.2	1227.2	1227.2	1227.2	1227.2
2.5°	1232.7	1228.6	1217.6	1227.2	1225.8
5°	1228.6	1224.4	1214.8	1225.8	1224.4
7.5°	1220.3	1217.6	1209.3	1221.7	1220.3
10°	1209.3	1208.0	1201.1	1213.4	1212.1
12.5°	1194.2	1194.2	1190.1	1201.1	1201.1
15°	1177.7	1179.1	1175.0	1187.3	1186.0
17.5°	1155.7	1159.9	1158.5	1170.8	1169.5
20°	1132.4	1136.5	1137.9	1151.6	1151.6
22.5°	1106.3	1111.8	1114.5	1128.2	1131.0
25°	1077.4	1085.6	1089.8	1104.9	1106.3
27.5°	1045.8	1058.2	1063.7	1077.4	1078.8
30°	1014.2	1025.2	1034.8	1049.9	1052.7
32.5°	979.8	993.6	1004.6	1022.4	1025.2
35°	942.7	959.2	973.0	992.2	996.3
37.5°	905.6	924.9	941.4	960.6	964.7
40°	869.9	887.8	907.0	927.6	933.1
42.5°	828.7	849.3	872.6	896.0	900.1
45°	786.1	812.2	838.3	861.6	868.5
47.5°	746.2	772.3	802.6	825.9	834.2
50°	702.2	732.5	762.7	790.2	798.4
52.5°	658.3	688.5	724.2	751.7	760.0
55°	615.7	644.5	685.7	713.2	721.5
57.5°	567.6	603.3	643.1	676.1	683.0
60°	520.8	556.6	601.9	633.5	644.5
62.5°	475.5	515.3	560.7	592.3	603.3
65°	426.0	470.0	516.7	551.1	562.1
67.5°	379.3	426.0	475.5	509.8	520.8
70°	331.2	377.9	430.1	467.2	476.9
72.5°	284.5	332.6	388.9	424.6	435.6
75°	236.4	287.2	344.9	383.4	395.8
77.5°	191.0	244.6	305.1	343.6	357.3
80°	149.8	204.8	265.2	306.5	317.4
82.5°	108.6	166.3	226.7	269.4	281.7
85°	72.8	130.6	192.4	233.6	247.4
87.5°	45.3	101.7	162.2	202.0	214.4
90°	25.5	93.3	161.5	208.4	221.7
92.5°	38.0	83.8	152.2	197.7	208.7
95°	81.8	87.6	145.1	189.2	202.7
97.5°	138.4	203.8	138.2	179.8	193.3
100°	205.5	262.1	155.5	172.9	183.7
102.5°	282.2	326.3	392.5	167.0	178.0
105°	361.9	396.4	453.0	497.8	466.9
107.5°	437.4	464.2	520.4	560.6	574.8
110°	512.6	535.3	590.4	624.3	638.8

TEST NUMBER: P1024861

CATALOG NUMBER: S124DIP-B1020D1205UB30-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	585.5	609.0	656.7	685.8	701.4
115°	660.8	676.6	719.5	752.0	761.6
117.5°	729.3	742.2	786.9	814.6	825.6
120°	797.6	806.4	845.0	874.8	883.5
122.5°	862.7	865.0	904.4	933.1	940.3
125°	922.8	926.0	958.1	987.7	997.1
127.5°	982.0	981.8	1015.1	1038.6	1047.2
130°	1037.5	1037.3	1062.8	1088.7	1096.9
132.5°	1089.8	1090.7	1111.8	1136.4	1143.4
135°	1140.6	1139.5	1153.8	1178.1	1188.6
137.5°	1187.1	1185.8	1197.1	1220.0	1225.7
140°	1232.3	1233.4	1237.0	1258.4	1266.4
142.5°	1271.7	1276.3	1276.1	1293.5	1299.0
145°	1313.5	1315.6	1315.6	1324.9	1332.8
147.5°	1346.0	1351.6	1350.4	1353.0	1359.6
150°	1382.0	1385.2	1384.1	1384.1	1385.2
152.5°	1410.8	1414.3	1411.9	1414.3	1413.1
155°	1438.6	1439.8	1436.3	1441.0	1437.5
157.5°	1463.0	1463.0	1458.4	1464.2	1458.4
160°	1483.9	1480.4	1479.3	1486.3	1479.3
162.5°	1502.5	1497.9	1496.7	1503.7	1495.5
165°	1517.6	1511.8	1511.8	1521.1	1510.6
167.5°	1530.4	1524.6	1523.4	1533.9	1522.2
170°	1540.8	1533.9	1535.0	1544.3	1532.7
172.5°	1547.8	1540.8	1542.0	1551.3	1538.5
175°	1552.4	1545.5	1546.6	1557.1	1543.1
177.5°	1555.9	1547.8	1550.1	1559.4	1545.5
180°	1552.4	1552.4	1552.4	1552.4	1552.4

(END OF REPORT)