

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: P1024853

Luminaire Tested: S124DIP-B1020D1205UB27-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024853
REPORT IS A COMBINATION OF REPORTS P995183 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1205UB27-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

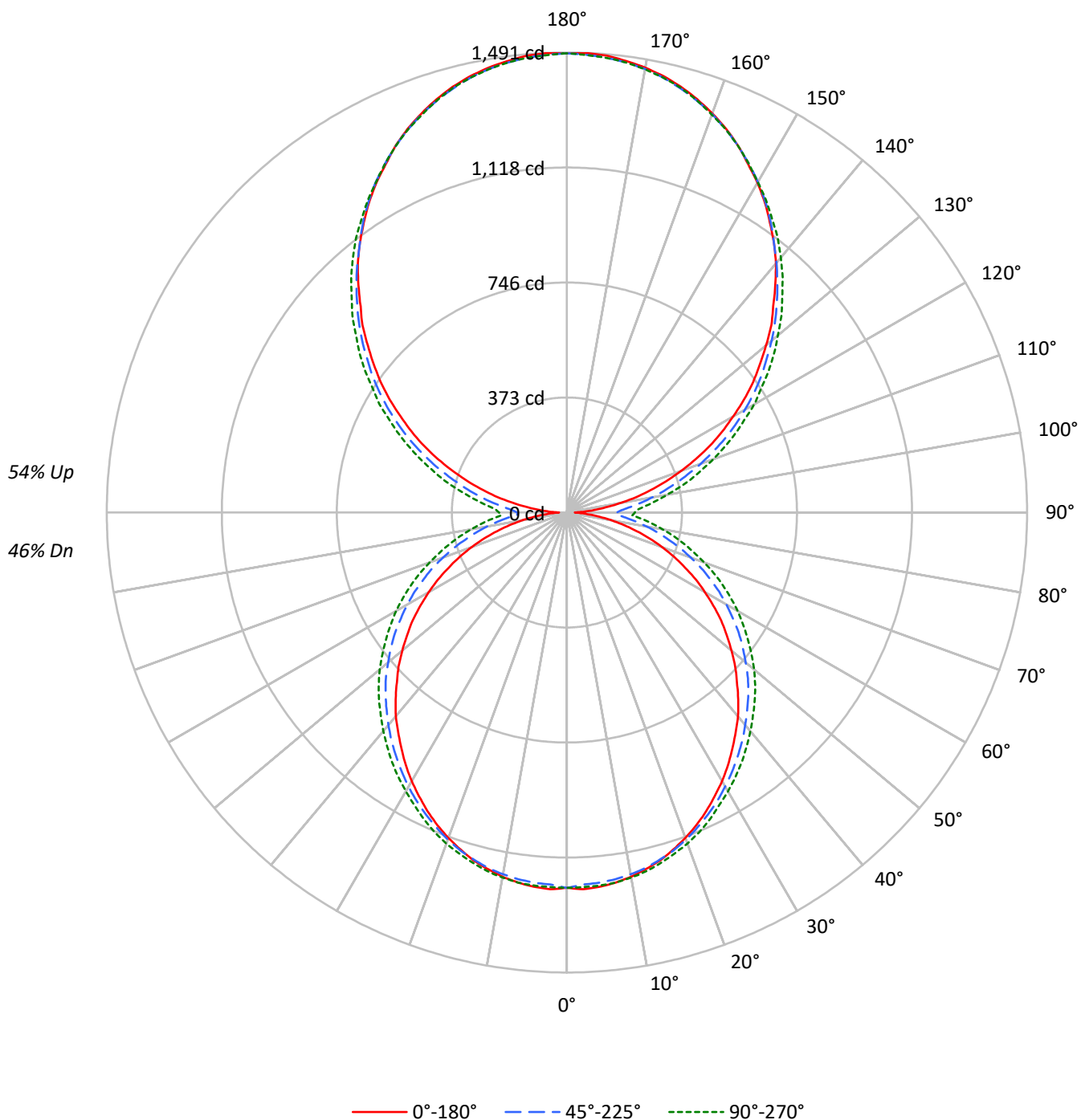
Lumens per Lamp: N/A
Luminaire Lumens: 8281.0 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	106	106	106	106	98	98	98	98	81	81	81	66	66	66	53	53	53	46		
1	96	91	87	83	88	84	80	77	70	67	65	57	55	53	45	44	43	37		
2	87	79	73	67	79	73	67	62	61	56	53	49	46	44	39	37	35	30		
3	79	69	62	55	72	64	57	52	53	48	44	43	40	37	34	32	30	25		
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	31	28	25	21		
5	66	54	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22	18		
6	61	48	40	34	56	45	37	32	38	32	28	31	27	23	25	21	19	16		
7	56	44	36	30	51	40	33	28	34	28	24	28	24	20	23	19	17	14		
8	52	40	32	26	48	37	30	25	31	25	21	26	21	18	21	17	15	12		
9	48	36	28	23	44	33	27	22	28	23	19	24	19	16	19	16	13	11		
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	18	14	12	10		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9921	9921	9921
5°	9948	9663	9680
10°	9884	9472	9445
15°	9791	9259	9181
20°	9654	9027	8923
25°	9499	8772	8646
30°	9333	8519	8363
35°	9144	8261	8111
40°	8992	8012	7851
45°	8768	7780	7620
50°	8577	7515	7378
55°	8379	7260	7098
60°	8072	6942	6834
65°	7734	6601	6517
70°	7324	6209	6151
75°	6752	5776	5802
80°	6108	5332	5436
85°	5254	4887	5140

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8768 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	1.4
10°-20°	330.3	4.0
20°-30°	499.4	6.0
30°-40°	604.2	7.3
40°-50°	638.7	7.7
50°-60°	601.1	7.3
60°-70°	498.8	6.0
70°-80°	350.0	4.2
80°-90°	200.5	2.4
90°-100°	214.5	2.6
100°-110°	377.6	4.6
110°-120°	552.0	6.7
120°-130°	683.9	8.3
130°-140°	745.5	9.0
140°-150°	721.5	8.7
150°-160°	604.5	7.3
160°-170°	402.2	4.9
170°-180°	140.8	1.7
0°-30°	945.0	11.4
0°-40°	1549.1	18.7
0°-60°	2789.0	33.7
0°-90°	3838.4	46.4
90°-120°	1144.1	13.8
90°-150°	3295.1	39.8
90°-180°	4443.0	53.7
0°-180°	8281.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1218	1214	1204	1215	1214	116
15°	1168	1169	1165	1177	1176	329
25°	1068	1076	1080	1095	1097	492
35°	935	951	965	984	988	585
45°	779	805	831	854	861	602
55°	610	639	680	707	715	544
65°	422	466	512	546	557	419
75°	234	285	342	380	392	249
85°	72	129	191	232	245	75
90°	25	92	160	207	220	20
95°	87	142	206	246	258	89
105°	280	309	364	401	416	298
115°	510	522	564	592	601	504
125°	736	735	768	792	797	657
135°	946	952	962	982	986	732
145°	1147	1150	1151	1158	1160	718
155°	1312	1312	1311	1316	1311	604
165°	1429	1425	1423	1430	1425	403
175°	1486	1480	1479	1487	1479	141
180°	1488	1488	1488	1488	1488	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1216.6	1216.6	1216.6	1216.6	1216.6
2.5°	1222.1	1218.0	1207.1	1216.6	1215.3
5°	1218.0	1213.9	1204.4	1215.3	1213.9
7.5°	1209.8	1207.1	1198.9	1211.2	1209.8
10°	1198.9	1197.6	1190.7	1203.0	1201.6
12.5°	1183.9	1183.9	1179.8	1190.7	1190.7
15°	1167.6	1168.9	1164.9	1177.1	1175.8
17.5°	1145.8	1149.9	1148.5	1160.8	1159.4
20°	1122.6	1126.7	1128.1	1141.7	1141.7
22.5°	1096.7	1102.2	1104.9	1118.5	1121.3
25°	1068.1	1076.3	1080.4	1095.4	1096.7
27.5°	1036.8	1049.1	1054.5	1068.1	1069.5
30°	1005.5	1016.4	1025.9	1040.9	1043.6
32.5°	971.4	985.0	995.9	1013.6	1016.4
35°	934.6	951.0	964.6	983.7	987.7
37.5°	897.8	916.9	933.3	952.3	956.4
40°	862.4	880.1	899.2	919.6	925.1
42.5°	821.5	842.0	865.1	888.3	892.4
45°	779.3	805.2	831.1	854.2	861.0
47.5°	739.8	765.7	795.6	818.8	827.0
50°	696.2	726.2	756.1	783.4	791.6
52.5°	652.6	682.6	718.0	745.2	753.4
55°	610.4	639.0	679.8	707.1	715.3
57.5°	562.7	598.1	637.6	670.3	677.1
60°	516.4	551.8	596.7	628.1	639.0
62.5°	471.4	510.9	555.9	587.2	598.1
65°	422.3	465.9	512.3	546.3	557.2
67.5°	376.0	422.3	471.4	505.5	516.4
70°	328.3	374.7	426.4	463.2	472.8
72.5°	282.0	329.7	385.6	421.0	431.9
75°	234.3	284.7	342.0	380.1	392.4
77.5°	189.4	242.5	302.5	340.6	354.2
80°	148.5	203.0	262.9	303.8	314.7
82.5°	107.6	164.9	224.8	267.0	279.3
85°	72.2	129.4	190.7	231.6	245.2
87.5°	45.0	100.8	160.8	200.3	212.5
90°	25.3	92.4	160.2	206.6	219.8
92.5°	50.3	113.0	177.4	219.0	231.1
95°	86.8	142.1	206.0	246.2	258.5
97.5°	126.8	175.6	240.6	280.6	292.9
100°	176.2	216.2	279.6	318.7	328.3
102.5°	229.1	260.3	321.2	360.1	372.2
105°	280.5	308.9	363.9	401.4	415.8
107.5°	336.9	361.2	410.0	448.7	457.1
110°	393.1	414.5	461.0	490.0	504.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	451.5	467.9	510.5	540.5	551.4
115°	510.1	522.3	563.6	592.4	600.8
117.5°	566.5	574.6	614.4	639.5	646.9
120°	621.5	630.2	666.3	687.8	701.0
122.5°	680.2	681.4	717.0	740.8	744.6
125°	736.4	735.1	767.9	791.5	797.4
127.5°	788.2	790.3	815.2	837.5	845.9
130°	842.1	844.2	866.0	888.2	891.8
132.5°	898.5	899.4	914.7	935.5	942.5
135°	945.5	952.4	962.0	981.5	986.1
137.5°	999.6	1001.7	1009.4	1026.4	1034.4
140°	1053.7	1054.7	1056.0	1072.5	1078.2
142.5°	1101.9	1104.2	1101.6	1116.6	1122.0
145°	1146.8	1150.0	1151.1	1158.2	1160.1
147.5°	1192.8	1197.2	1196.0	1196.3	1200.5
150°	1234.3	1237.5	1237.5	1237.5	1236.3
152.5°	1272.0	1274.3	1275.5	1278.9	1275.5
155°	1312.3	1312.3	1311.1	1315.7	1311.1
157.5°	1346.8	1344.5	1344.5	1348.0	1344.5
160°	1376.8	1375.6	1374.5	1377.9	1372.2
162.5°	1404.4	1400.9	1399.8	1406.7	1400.9
165°	1428.6	1425.1	1422.8	1429.7	1425.1
167.5°	1448.1	1443.5	1443.5	1450.4	1443.5
170°	1464.2	1458.5	1459.6	1466.5	1458.5
172.5°	1475.8	1471.2	1471.2	1479.2	1471.2
175°	1486.1	1480.4	1479.2	1487.3	1479.2
177.5°	1490.7	1485.0	1485.0	1493.0	1483.8
180°	1488.4	1488.4	1488.4	1488.4	1488.4

(END OF REPORT)