

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: P1024880

Luminaire Tested: S124DIP-B1020D1205UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024880
REPORT IS A COMBINATION OF REPORTS P995225 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1205UB40-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

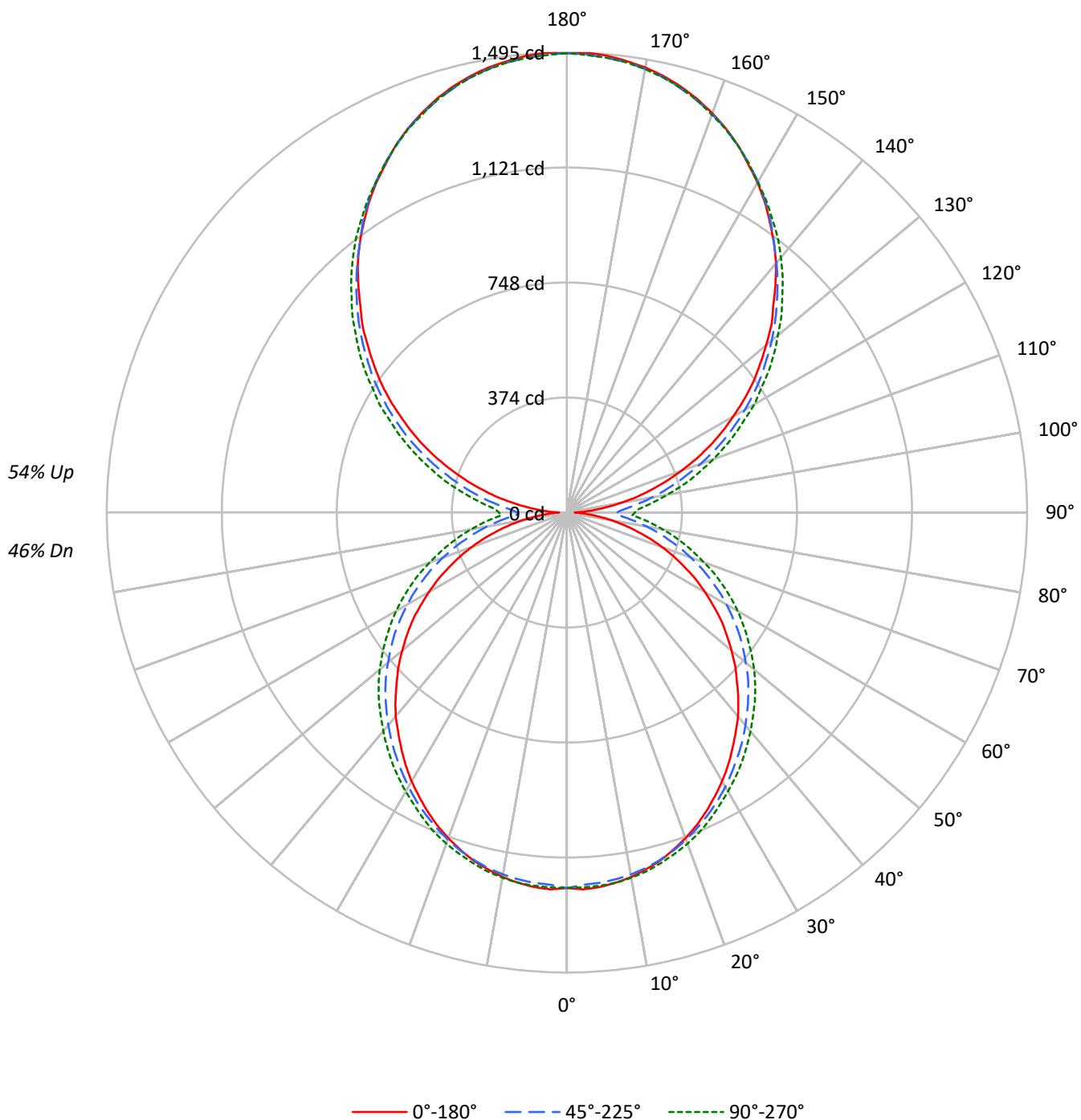
Lumens per Lamp: N/A
Luminaire Lumens: 8305.9 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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					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	22	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	13		
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°	9952	9952	9952
5°	9979	9692	9710
10°	9915	9502	9475
15°	9822	9287	9209
20°	9684	9055	8951
25°	9530	8800	8673
30°	9362	8546	8390
35°	9172	8286	8137
40°	9020	8037	7876
45°	8795	7804	7644
50°	8604	7539	7400
55°	8405	7283	7120
60°	8097	6965	6856
65°	7759	6622	6538
70°	7349	6230	6169
75°	6775	5792	5820
80°	6128	5350	5453
85°	5268	4902	5156

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8795 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.6	1.4
10°-20°	331.3	4.0
20°-30°	501.0	6.0
30°-40°	606.1	7.3
40°-50°	640.7	7.7
50°-60°	603.0	7.3
60°-70°	500.4	6.0
70°-80°	351.1	4.2
80°-90°	201.1	2.4
90°-100°	215.2	2.6
100°-110°	378.7	4.6
110°-120°	553.7	6.7
120°-130°	685.9	8.3
130°-140°	747.6	9.0
140°-150°	723.6	8.7
150°-160°	606.3	7.3
160°-170°	403.4	4.9
170°-180°	141.2	1.7
0°-30°	947.9	11.4
0°-40°	1554.0	18.7
0°-60°	2797.7	33.7
0°-90°	3850.4	46.4
90°-120°	1147.5	13.8
90°-150°	3304.7	39.8
90°-180°	4456.0	53.6
0°-180°	8305.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1220	1220	1220	1220	1220	
5°	1222	1218	1208	1219	1218	116
15°	1171	1173	1168	1181	1179	330
25°	1072	1080	1084	1099	1100	494
35°	938	954	968	987	991	587
45°	782	808	834	857	864	604
55°	612	641	682	709	718	546
65°	424	467	514	548	559	420
75°	235	286	343	381	394	250
85°	72	130	191	232	246	75
90°	25	93	161	207	220	20
95°	87	143	207	247	259	89
105°	281	310	365	403	417	299
115°	512	524	565	594	603	505
125°	739	737	770	794	800	659
135°	948	955	965	984	989	734
145°	1150	1153	1154	1162	1164	720
155°	1316	1316	1315	1320	1315	606
165°	1433	1429	1427	1434	1429	404
175°	1490	1485	1484	1492	1484	142
180°	1493	1493	1493	1493	1493	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1220.4	1220.4	1220.4	1220.4	1220.4
2.5°	1225.9	1221.8	1210.9	1220.4	1219.1
5°	1221.8	1217.7	1208.1	1219.1	1217.7
7.5°	1213.6	1210.9	1202.7	1215.0	1213.6
10°	1202.7	1201.3	1194.5	1206.8	1205.4
12.5°	1187.6	1187.6	1183.5	1194.5	1194.5
15°	1171.2	1172.6	1168.5	1180.8	1179.4
17.5°	1149.4	1153.5	1152.1	1164.4	1163.0
20°	1126.1	1130.2	1131.6	1145.3	1145.3
22.5°	1100.2	1105.6	1108.4	1122.0	1124.8
25°	1071.5	1079.7	1083.8	1098.8	1100.2
27.5°	1040.0	1052.3	1057.8	1071.5	1072.8
30°	1008.6	1019.5	1029.1	1044.1	1046.9
32.5°	974.4	988.1	999.0	1016.8	1019.5
35°	937.5	953.9	967.6	986.7	990.8
37.5°	900.6	919.8	936.2	955.3	959.4
40°	865.1	882.9	902.0	922.5	928.0
42.5°	824.1	844.6	867.8	891.1	895.2
45°	781.7	807.7	833.7	856.9	863.7
47.5°	742.1	768.1	798.1	821.4	829.6
50°	698.4	728.4	758.5	785.8	794.0
52.5°	654.6	684.7	720.2	747.6	755.8
55°	612.3	641.0	682.0	709.3	717.5
57.5°	564.4	600.0	639.6	672.4	679.2
60°	518.0	553.5	598.6	630.0	641.0
62.5°	472.9	512.5	557.6	589.0	600.0
65°	423.7	467.4	513.9	548.0	559.0
67.5°	377.2	423.7	472.9	507.0	518.0
70°	329.4	375.8	427.8	464.7	474.2
72.5°	282.9	330.7	386.8	422.3	433.2
75°	235.1	285.6	343.0	381.3	393.6
77.5°	190.0	243.3	303.4	341.7	355.3
80°	149.0	203.6	263.8	304.8	315.7
82.5°	108.0	165.4	225.5	267.9	280.2
85°	72.4	129.8	191.3	232.3	246.0
87.5°	45.1	101.1	161.3	200.9	213.2
90°	25.4	92.7	160.7	207.2	220.5
92.5°	50.5	113.3	177.9	219.7	231.7
95°	87.1	142.6	206.6	247.0	259.3
97.5°	127.2	176.1	241.4	281.5	293.8
100°	176.6	216.8	280.5	319.7	329.2
102.5°	229.7	261.0	322.1	361.2	373.2
105°	281.3	309.7	365.0	402.6	417.0
107.5°	337.9	362.2	411.3	450.0	458.4
110°	394.2	415.7	462.3	491.4	505.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	452.9	469.3	512.1	542.1	553.1
115°	511.6	523.9	565.2	594.2	602.6
117.5°	568.1	576.3	616.2	641.4	648.8
120°	623.3	632.0	668.2	689.8	703.0
122.5°	682.2	683.3	719.1	743.0	746.7
125°	738.6	737.2	770.2	793.8	799.7
127.5°	790.5	792.6	817.6	839.9	848.3
130°	844.6	846.6	868.5	890.8	894.4
132.5°	901.1	902.0	917.3	938.3	945.3
135°	948.2	955.1	964.7	984.3	989.1
137.5°	1002.5	1004.6	1012.4	1029.4	1037.4
140°	1056.7	1057.7	1059.0	1075.7	1081.3
142.5°	1105.1	1107.4	1104.8	1119.8	1125.3
145°	1150.1	1153.3	1154.5	1161.5	1163.6
147.5°	1196.3	1200.7	1199.5	1199.7	1204.0
150°	1237.8	1241.1	1241.1	1241.1	1239.9
152.5°	1275.7	1278.0	1279.2	1282.6	1279.2
155°	1316.1	1316.1	1315.0	1319.6	1315.0
157.5°	1350.7	1348.4	1348.4	1351.9	1348.4
160°	1380.8	1379.6	1378.4	1381.9	1376.1
162.5°	1408.5	1405.0	1403.8	1410.8	1405.0
165°	1432.7	1429.2	1426.9	1433.9	1429.2
167.5°	1452.3	1447.7	1447.7	1454.6	1447.7
170°	1468.5	1462.7	1463.9	1470.8	1462.7
172.5°	1480.0	1475.4	1475.4	1483.5	1475.4
175°	1490.4	1484.7	1483.5	1491.6	1483.5
177.5°	1495.1	1489.3	1489.3	1497.4	1488.1
180°	1492.7	1492.7	1492.7	1492.7	1492.7

(END OF REPORT)