

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: P1024836

Luminaire Tested: S124DIP-B1020D1035UB40-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024836
REPORT IS A COMBINATION OF REPORTS P995166 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1035UB40-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

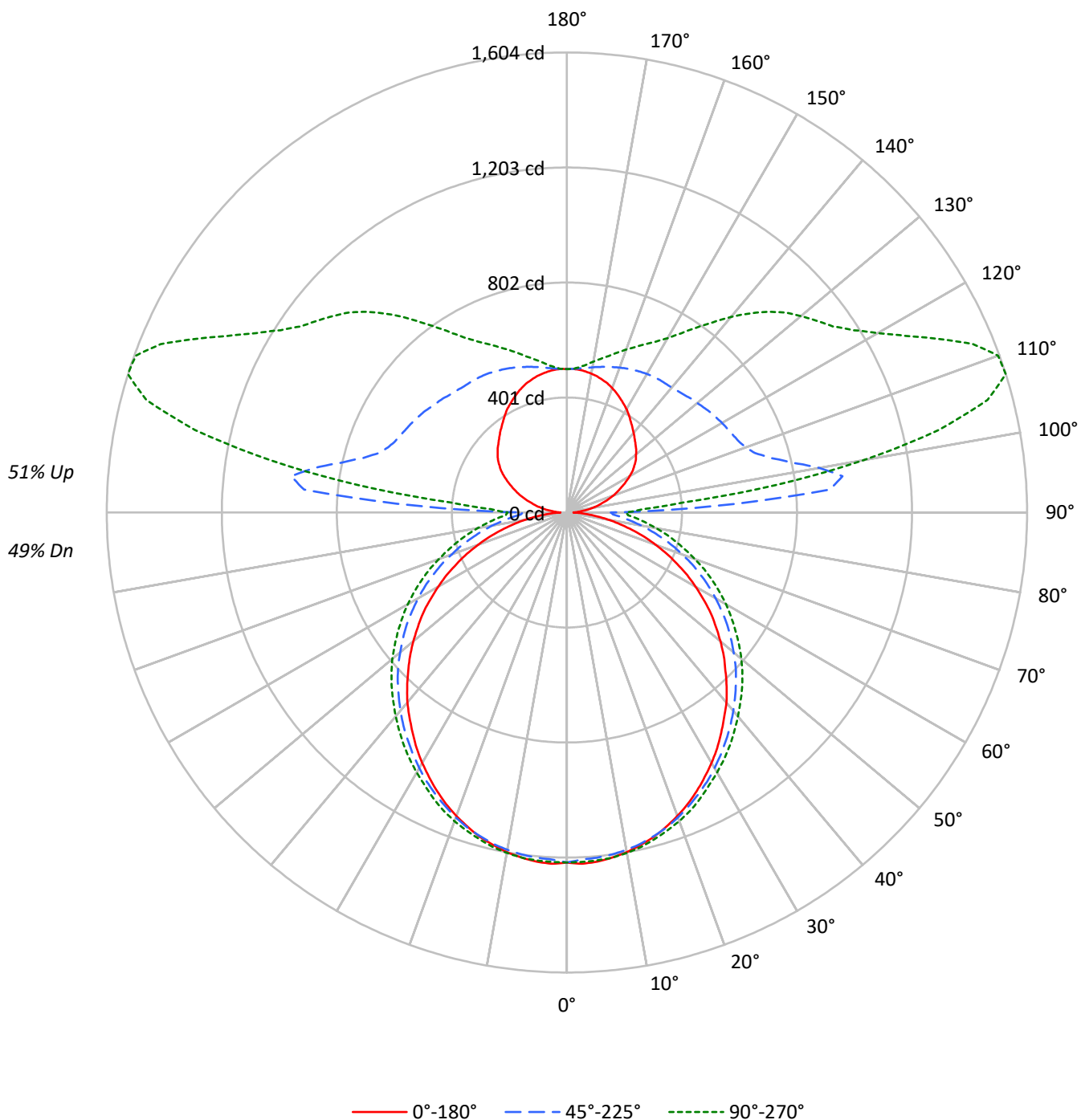
Lumens per Lamp: N/A
Luminaire Lumens: 7813.2 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 75.3
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: P1024836

CATALOG NUMBER: S124DIP-B1020D1035UB40-4F0-XX-W2A-D4

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	83	83	83	69	69	69	55	55	55
1	97	92	88	84	89	85	81	78	71	69	66	59	57	55	47	46	45
2	88	80	73	68	80	73	68	63	62	58	54	51	48	45	41	39	37
3	80	70	62	56	73	64	57	52	54	49	45	45	41	38	36	33	31
4	73	61	53	47	66	57	49	44	48	42	38	40	35	32	32	29	26
5	67	55	46	40	61	50	43	37	43	37	32	35	31	28	29	25	23
6	61	49	40	34	56	45	38	32	38	32	28	32	27	24	26	23	20
7	57	44	36	30	52	41	33	28	35	29	25	29	24	21	24	20	18
8	52	40	32	26	48	37	30	25	32	26	22	26	22	19	22	18	16
9	49	36	29	23	45	34	27	22	29	23	19	24	20	17	20	17	14
10	46	33	26	21	42	31	24	20	27	21	17	22	18	15	19	15	13

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

TEST NUMBER: P1024836

CATALOG NUMBER: S124DIP-B1020D1035UB40-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.6	1.5
10°-20°	331.3	4.2
20°-30°	501.0	6.4
30°-40°	606.1	7.8
40°-50°	640.7	8.2
50°-60°	603.0	7.7
60°-70°	500.4	6.4
70°-80°	351.1	4.5
80°-90°	199.9	2.6
90°-100°	489.4	6.3
100°-110°	843.0	10.8
110°-120°	732.1	9.4
120°-130°	598.8	7.7
130°-140°	486.4	6.2
140°-150°	363.4	4.7
150°-160°	253.5	3.2
160°-170°	149.1	1.9
170°-180°	48.5	0.6
0°-30°	947.9	12.1
0°-40°	1554.0	19.9
0°-60°	2797.7	35.8
0°-90°	3849.1	49.3
90°-120°	2064.5	26.4
90°-150°	3513.1	45.0
90°-180°	3964.0	50.7
0°-180°	7813.2	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°	23	84	153	195	206	17
95°	50	165	920	552	408	50
105°	127	206	735	1512	1518	136
115°	211	275	639	1199	1432	209
125°	288	339	610	1004	1132	257
135°	338	402	579	868	990	262
145°	388	442	564	712	787	243
155°	439	474	548	621	648	203
165°	479	493	526	557	565	135
175°	499	500	504	511	509	47
180°	500	500	500	500	500	

TEST NUMBER: P1024836

CATALOG NUMBER: S124DIP-B1020D1035UB40-4F0-XX-W2A-D4

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°	22.9	84.4	153.0	194.6	206.5
92.5°	34.3	144.0	512.3	292.6	265.7
95°	50.2	165.1	919.8	552.3	407.9
97.5°	70.4	169.0	969.0	957.4	735.8
100°	89.7	178.4	894.0	1261.0	1051.4
102.5°	109.3	190.5	803.6	1447.4	1327.7
105°	127.3	206.2	734.8	1512.5	1518.0
107.5°	149.9	223.6	687.8	1483.4	1604.1
110°	171.1	239.9	663.6	1396.6	1599.3

TEST NUMBER: P1024836

CATALOG NUMBER: S124DIP-B1020D1035UB40-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	191.4	257.4	647.9	1292.1	1533.1
115°	210.6	274.6	639.1	1198.9	1431.5
117.5°	232.3	291.5	631.3	1122.8	1333.2
120°	252.5	306.6	624.5	1069.0	1250.3
122.5°	272.1	322.8	616.6	1032.2	1183.2
125°	287.5	339.2	610.2	1004.2	1131.7
127.5°	303.3	356.8	601.4	975.8	1097.4
130°	314.6	372.6	593.6	945.0	1065.6
132.5°	327.4	387.4	587.1	909.6	1032.3
135°	337.8	401.7	579.3	868.5	989.7
137.5°	349.6	412.6	573.8	826.2	941.2
140°	362.4	424.0	568.7	785.0	890.1
142.5°	374.8	434.3	566.0	747.6	836.1
145°	387.6	442.2	564.1	711.8	787.1
147.5°	402.3	451.0	561.1	680.9	740.9
150°	416.1	459.4	558.2	657.4	701.6
152.5°	427.5	467.2	553.3	638.8	672.2
155°	439.3	474.2	548.3	621.1	647.6
157.5°	451.1	480.5	543.4	604.3	625.0
160°	461.9	485.9	537.5	587.7	604.4
162.5°	471.7	490.4	531.6	571.4	584.7
165°	478.6	493.4	525.7	556.7	565.1
167.5°	486.4	495.8	519.8	543.9	549.3
170°	491.3	497.8	514.0	531.2	534.6
172.5°	496.3	499.2	508.1	519.8	519.8
175°	499.2	500.2	504.1	511.0	509.0
177.5°	501.2	500.2	501.2	504.6	501.2
180°	500.2	500.2	500.2	500.2	500.2

(END OF REPORT)