

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: P1024835

Luminaire Tested: S124DIP-B1020D1035UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024835
REPORT IS A COMBINATION OF REPORTS P995165 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-D1
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

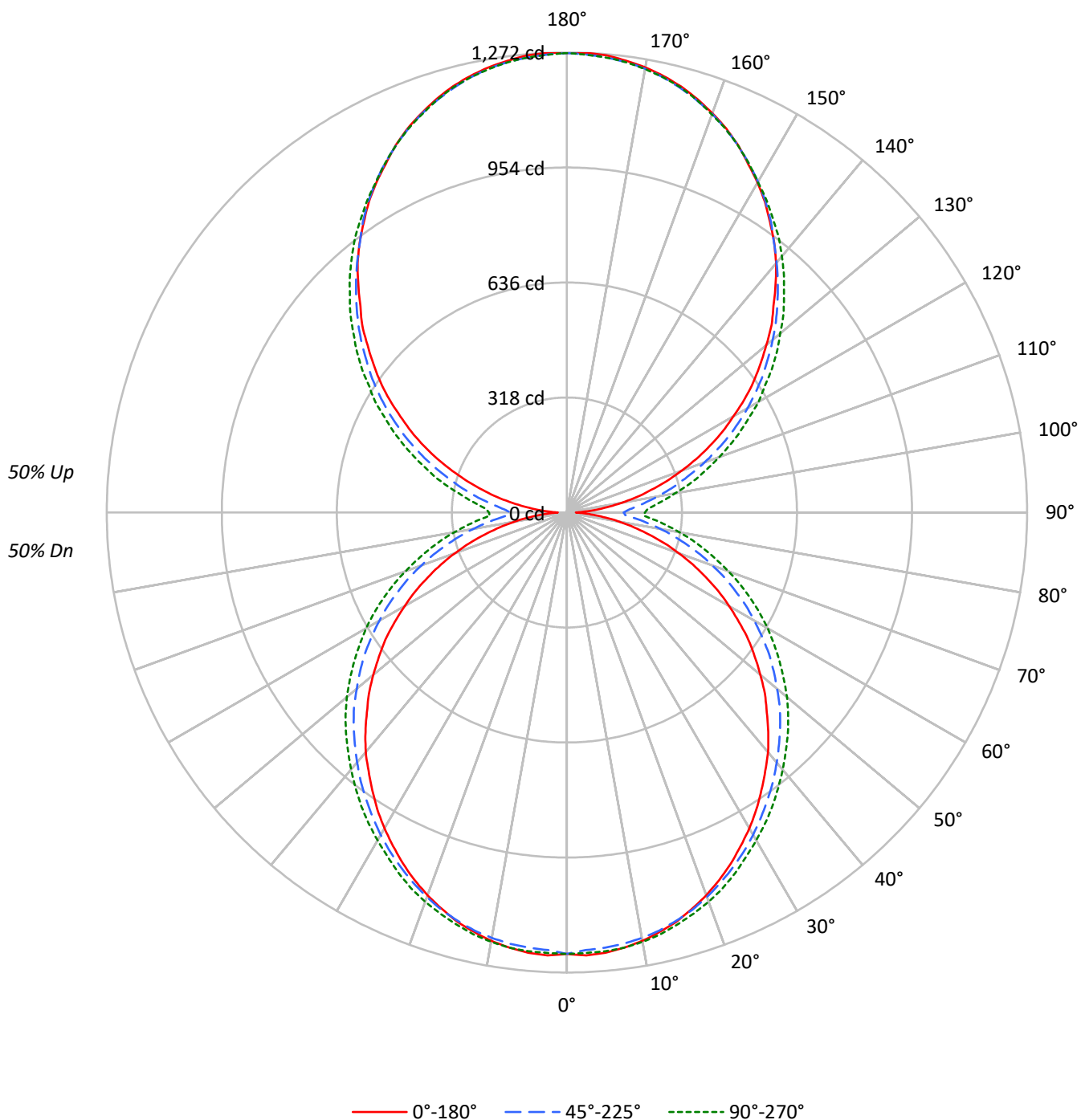
Lumens per Lamp: N/A
Luminaire Lumens: 7689.0 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	56	56	56
1	97	92	88	84	89	85	81	78	72	69	66	59	57	56	48	47	45	45	45	40
2	88	80	73	68	80	74	68	63	62	58	54	51	48	46	42	39	37	37	37	33
3	80	70	62	56	73	64	58	52	54	49	45	45	41	38	37	34	31	31	31	27
4	73	61	53	47	67	57	50	44	48	42	38	40	36	32	32	29	27	27	27	23
5	67	55	46	40	61	51	43	37	43	37	33	36	31	28	29	26	23	23	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	26	23	20	20	20	17
7	57	44	36	30	52	41	34	28	35	29	25	29	25	21	24	20	18	18	18	15
8	53	40	32	26	48	37	30	25	32	26	22	27	22	19	22	19	16	16	16	14
9	49	36	29	24	45	34	27	22	29	23	20	25	20	17	20	17	14	14	14	12
10	46	33	26	21	42	31	24	20	27	21	18	23	18	15	19	15	13	13	13	11

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	1.5
10°-20°	331.3	4.3
20°-30°	501.0	6.5
30°-40°	606.1	7.9
40°-50°	640.7	8.3
50°-60°	603.0	7.8
60°-70°	500.4	6.5
70°-80°	351.1	4.6
80°-90°	200.7	2.6
90°-100°	200.7	2.6
100°-110°	335.3	4.4
110°-120°	480.0	6.2
120°-130°	588.7	7.7
130°-140°	638.5	8.3
140°-150°	616.3	8.0
150°-160°	516.0	6.7
160°-170°	343.3	4.5
170°-180°	120.2	1.6
0°-30°	947.9	12.3
0°-40°	1554.0	20.2
0°-60°	2797.7	36.4
0°-90°	3849.9	50.1
90°-120°	1016.0	13.2
90°-150°	2859.5	37.2
90°-180°	3839.0	49.9
0°-180°	7689.0	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	90	157	202	215	19
95°	77	131	194	233	246	78
105°	241	270	324	361	375	257
115°	437	449	491	520	528	431
125°	630	628	661	685	692	561
135°	808	813	823	843	848	625
145°	979	982	983	990	992	613
155°	1120	1120	1119	1123	1119	516
165°	1219	1216	1214	1220	1216	344
175°	1269	1264	1263	1270	1263	120
180°	1270	1270	1270	1270	1270	

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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°	24.8	90.3	156.9	202.4	215.4
92.5°	46.0	106.6	170.3	211.6	223.5
95°	76.8	130.7	193.6	233.4	245.7
97.5°	110.7	158.2	222.2	261.6	273.9
100°	152.6	192.1	254.2	293.1	302.6
102.5°	197.8	228.9	288.6	327.2	339.0
105°	241.3	269.5	324.1	361.2	375.1
107.5°	289.4	313.6	362.5	400.5	409.1
110°	337.1	358.3	405.1	434.6	448.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	386.9	403.3	446.5	476.5	487.5
115°	436.6	448.9	490.7	519.8	528.4
117.5°	484.8	493.0	533.0	558.7	566.7
120°	531.5	539.6	576.3	598.7	611.6
122.5°	581.6	582.6	618.5	643.0	647.6
125°	629.5	628.1	661.3	685.2	691.5
127.5°	673.7	675.2	700.6	723.2	731.8
130°	719.5	721.0	742.9	765.5	769.8
132.5°	767.6	768.2	783.6	804.9	812.1
135°	807.5	813.4	823.0	842.9	848.2
137.5°	853.7	855.3	862.7	880.2	888.1
140°	899.8	900.5	901.8	918.6	924.4
142.5°	940.8	942.8	940.4	955.4	960.9
145°	979.1	981.6	982.6	989.8	992.4
147.5°	1018.4	1021.9	1021.0	1021.4	1025.8
150°	1053.8	1056.3	1056.3	1056.3	1055.3
152.5°	1085.8	1087.8	1088.8	1091.7	1088.8
155°	1120.2	1120.2	1119.2	1123.1	1119.2
157.5°	1149.7	1147.7	1147.7	1150.7	1147.7
160°	1175.2	1174.2	1173.3	1176.2	1171.3
162.5°	1198.8	1195.9	1194.9	1200.8	1195.9
165°	1219.4	1216.5	1214.5	1220.4	1216.5
167.5°	1236.1	1232.2	1232.2	1238.1	1232.2
170°	1249.9	1245.0	1246.0	1251.9	1245.0
172.5°	1259.7	1255.8	1255.8	1262.7	1255.8
175°	1268.6	1263.7	1262.7	1269.6	1262.7
177.5°	1272.5	1267.6	1267.6	1274.5	1266.6
180°	1270.5	1270.5	1270.5	1270.5	1270.5

(END OF REPORT)