

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: P1024808

Luminaire Tested: S124DIP-B1020D1035UB27-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024808
REPORT IS A COMBINATION OF REPORTS P995123 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1035UB27-4F0-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

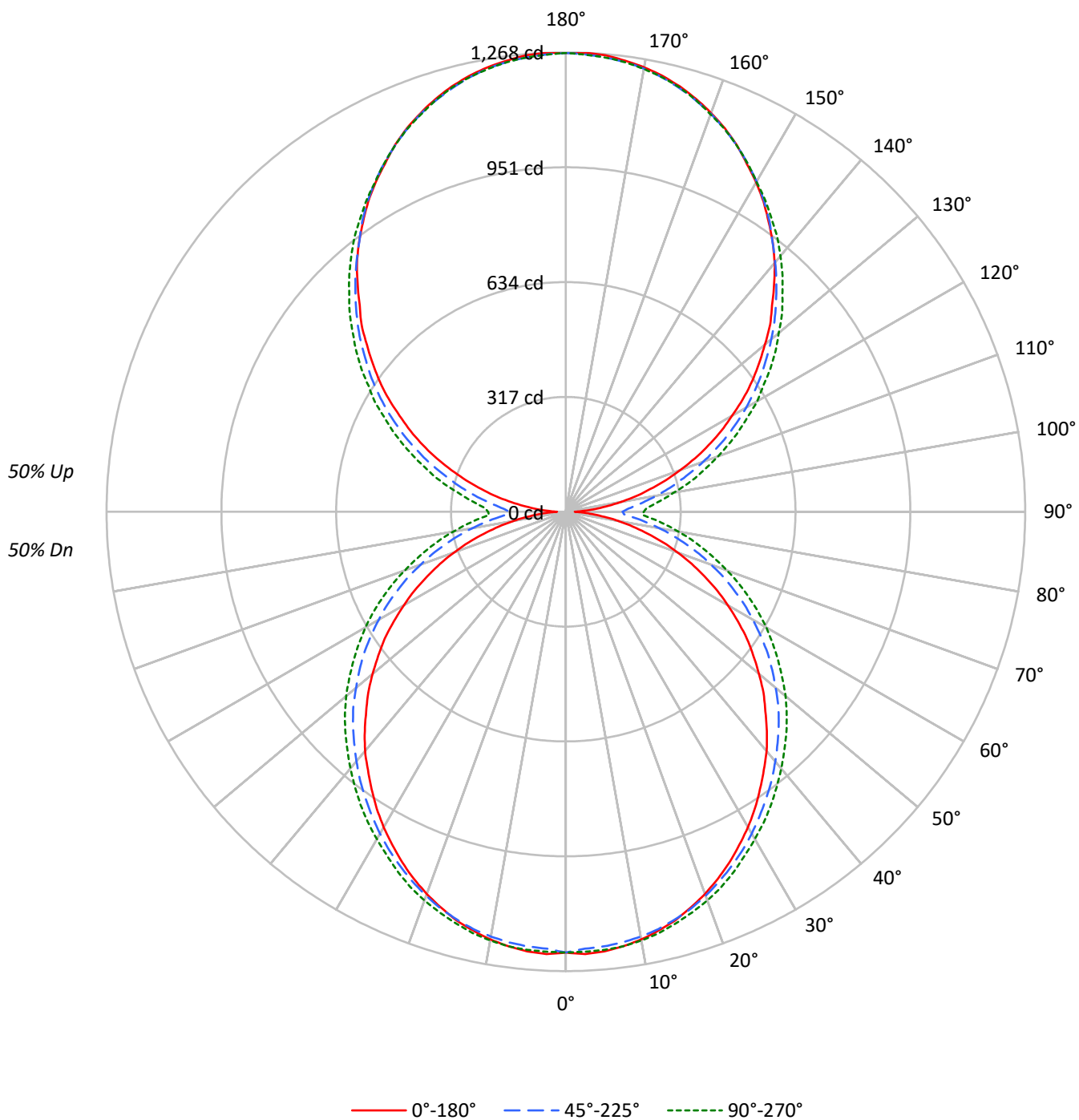
Lumens per Lamp: N/A
Luminaire Lumens: 7665.0 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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
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°	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	1.5
10°-20°	330.3	4.3
20°-30°	499.4	6.5
30°-40°	604.2	7.9
40°-50°	638.7	8.3
50°-60°	601.1	7.8
60°-70°	498.8	6.5
70°-80°	350.0	4.6
80°-90°	200.0	2.6
90°-100°	200.0	2.6
100°-110°	334.3	4.4
110°-120°	478.5	6.2
120°-130°	586.9	7.7
130°-140°	636.5	8.3
140°-150°	614.4	8.0
150°-160°	514.4	6.7
160°-170°	342.3	4.5
170°-180°	119.8	1.6
0°-30°	945.0	12.3
0°-40°	1549.1	20.2
0°-60°	2789.0	36.4
0°-90°	3837.9	50.1
90°-120°	1012.8	13.2
90°-150°	2850.5	37.2
90°-180°	3827.0	49.9
0°-180°	7665.0	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	90	156	202	215	19
95°	76	130	193	233	245	78
105°	240	269	323	360	374	256
115°	435	448	489	518	527	430
125°	627	626	659	683	689	560
135°	805	811	820	840	845	623
145°	976	979	980	987	989	611
155°	1117	1117	1116	1120	1116	514
165°	1216	1213	1211	1217	1213	343
175°	1265	1260	1259	1266	1259	120
180°	1267	1267	1267	1267	1267	

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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°	24.7	90.0	156.5	201.8	214.7
92.5°	45.9	106.3	169.8	210.9	222.8
95°	76.5	130.3	192.9	232.7	245.0
97.5°	110.3	157.8	221.4	260.7	273.0
100°	152.1	191.5	253.4	292.1	301.7
102.5°	197.2	228.2	287.7	326.2	338.0
105°	240.5	268.7	323.0	360.1	373.9
107.5°	288.5	312.6	361.3	399.3	407.8
110°	336.1	357.2	403.9	433.2	447.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	385.7	402.1	445.0	475.0	485.9
115°	435.3	447.5	489.1	518.2	526.7
117.5°	483.3	491.4	531.3	557.0	564.9
120°	529.9	537.9	574.5	596.9	609.7
122.5°	579.8	580.8	616.6	640.9	645.6
125°	627.4	626.1	659.1	683.1	689.3
127.5°	671.5	673.1	698.4	721.0	729.5
130°	717.2	718.8	740.6	763.1	767.4
132.5°	765.2	765.8	781.2	802.3	809.6
135°	805.0	810.8	820.4	840.3	845.4
137.5°	851.0	852.6	860.0	877.5	885.3
140°	897.0	897.7	899.0	915.7	921.5
142.5°	937.9	939.8	937.4	952.4	957.8
145°	976.1	978.6	979.6	986.8	989.2
147.5°	1015.3	1018.7	1017.8	1018.2	1022.6
150°	1050.5	1053.0	1053.0	1053.0	1052.1
152.5°	1082.4	1084.4	1085.4	1088.3	1085.4
155°	1116.7	1116.7	1115.7	1119.6	1115.7
157.5°	1146.1	1144.1	1144.1	1147.1	1144.1
160°	1171.6	1170.6	1169.6	1172.5	1167.6
162.5°	1195.1	1192.1	1191.2	1197.0	1192.1
165°	1215.6	1212.7	1210.7	1216.6	1212.7
167.5°	1232.3	1228.4	1228.4	1234.3	1228.4
170°	1246.0	1241.1	1242.1	1248.0	1241.1
172.5°	1255.8	1251.9	1251.9	1258.7	1251.9
175°	1264.6	1259.7	1258.7	1265.6	1258.7
177.5°	1268.5	1263.6	1263.6	1270.5	1262.7
180°	1266.6	1266.6	1266.6	1266.6	1266.6

(END OF REPORT)