

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: P1024898

Luminaire Tested: S124DIP-B1020D365UB27-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024898
REPORT IS A COMBINATION OF REPORTS P995243 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D365UB27-4F0-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

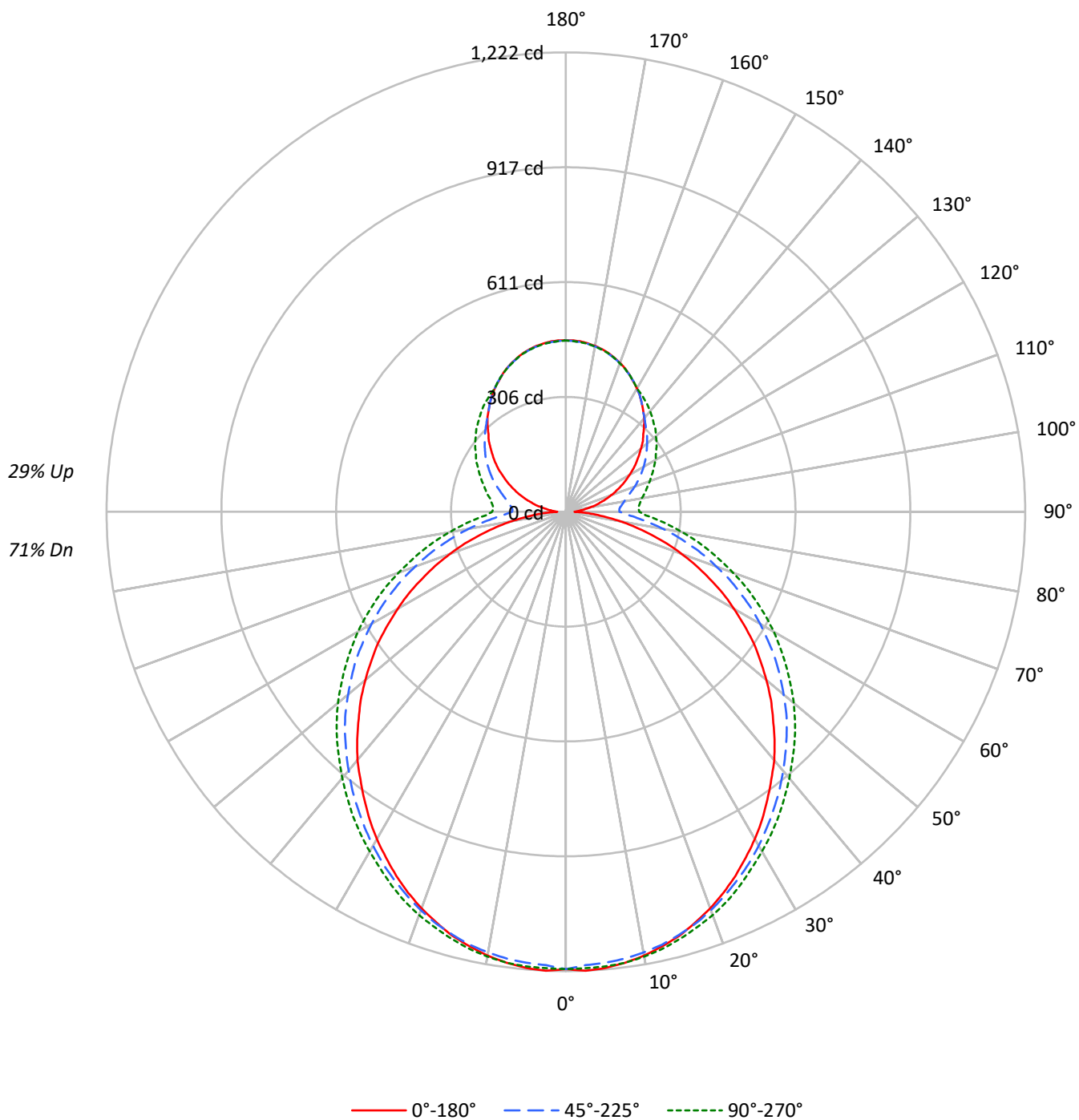
Lumens per Lamp: N/A
Luminaire Lumens: 5413.0 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
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
RCR																	
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75
1	101	96	91	87	95	91	87	83	81	78	75	72	70	68	64	63	61
2	91	83	76	70	86	79	72	67	70	65	61	63	59	55	56	53	50
3	83	72	64	58	78	69	61	55	62	56	51	55	50	46	49	45	42
4	76	64	55	49	71	61	53	47	54	48	43	49	44	39	43	39	36
5	70	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31
6	64	51	42	36	60	48	40	35	44	37	32	39	34	30	35	31	27
7	59	46	37	31	56	44	36	30	40	33	28	36	30	26	32	27	24
8	55	42	34	28	52	40	32	27	36	30	25	33	27	23	29	25	21
9	51	38	30	25	48	36	29	24	33	27	22	30	25	21	27	23	19
10	48	35	27	22	45	34	26	22	31	24	20	28	23	19	25	21	17

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	2.1
10°-20°	330.3	6.1
20°-30°	499.4	9.2
30°-40°	604.2	11.2
40°-50°	638.7	11.8
50°-60°	601.1	11.1
60°-70°	498.8	9.2
70°-80°	350.0	6.5
80°-90°	198.3	3.7
90°-100°	147.2	2.7
100°-110°	176.0	3.3
110°-120°	209.5	3.9
120°-130°	232.1	4.3
130°-140°	238.0	4.4
140°-150°	222.8	4.1
150°-160°	185.0	3.4
160°-170°	123.1	2.3
170°-180°	43.1	0.8
0°-30°	945.0	17.5
0°-40°	1549.1	28.6
0°-60°	2789.0	51.5
0°-90°	3836.2	70.9
90°-120°	532.6	9.8
90°-150°	1225.6	22.6
90°-180°	1577.0	29.1
0°-180°	5413.0	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°	23	81	143	184	196	16
95°	39	87	145	183	195	37
105°	94	122	174	209	221	101
115°	162	174	217	247	256	160
125°	229	228	262	287	294	205
135°	291	293	303	324	331	226
145°	352	352	352	360	364	220
155°	402	402	401	403	401	185
165°	437	436	436	438	436	123
175°	455	453	453	455	453	43
180°	456	456	456	456	456	

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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°	22.9	81.2	142.7	184.3	195.9
92.5°	29.6	81.8	142.2	181.5	192.7
95°	38.8	87.0	145.3	183.1	195.4
97.5°	50.1	92.5	151.2	188.0	200.3
100°	64.3	101.1	157.4	194.9	204.5
102.5°	80.5	110.9	165.4	202.0	213.2
105°	94.4	121.9	173.8	208.9	220.9
107.5°	111.7	135.1	183.2	218.7	227.8
110°	127.9	147.7	195.0	225.6	237.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	144.8	161.2	205.4	235.4	246.3
115°	161.8	174.0	216.9	246.6	255.7
117.5°	179.1	187.2	227.7	255.3	265.1
120°	194.9	200.5	238.9	264.4	276.0
122.5°	212.9	213.3	249.7	275.9	283.7
125°	229.1	227.8	261.5	286.7	294.2
127.5°	245.0	244.7	271.2	295.1	304.3
130°	260.6	260.3	282.1	305.9	312.6
132.5°	277.9	277.2	293.2	315.6	323.5
135°	291.3	293.4	303.0	324.1	331.1
137.5°	307.8	307.6	313.7	333.0	340.3
140°	324.4	323.8	325.1	342.4	348.9
142.5°	338.2	338.9	337.2	352.2	357.6
145°	352.0	352.0	352.3	360.2	364.5
147.5°	366.1	366.4	366.1	367.1	372.2
150°	378.7	378.8	378.8	378.8	378.4
152.5°	389.3	390.0	390.4	391.4	390.4
155°	401.7	401.7	401.3	402.7	401.3
157.5°	412.2	411.5	411.5	412.6	411.5
160°	421.4	421.0	420.7	421.7	420.0
162.5°	429.8	428.8	428.4	430.5	428.8
165°	437.2	436.2	435.5	437.6	436.2
167.5°	443.2	441.8	441.8	443.9	441.8
170°	448.2	446.4	446.8	448.9	446.4
172.5°	451.7	450.3	450.3	452.7	450.3
175°	454.9	453.1	452.7	455.2	452.7
177.5°	456.3	454.5	454.5	457.0	454.2
180°	455.6	455.6	455.6	455.6	455.6

(END OF REPORT)