

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: P1024899

Luminaire Tested: S124DIP-B1020D365UB27-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024899
REPORT IS A COMBINATION OF REPORTS P995244 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D365UB27-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

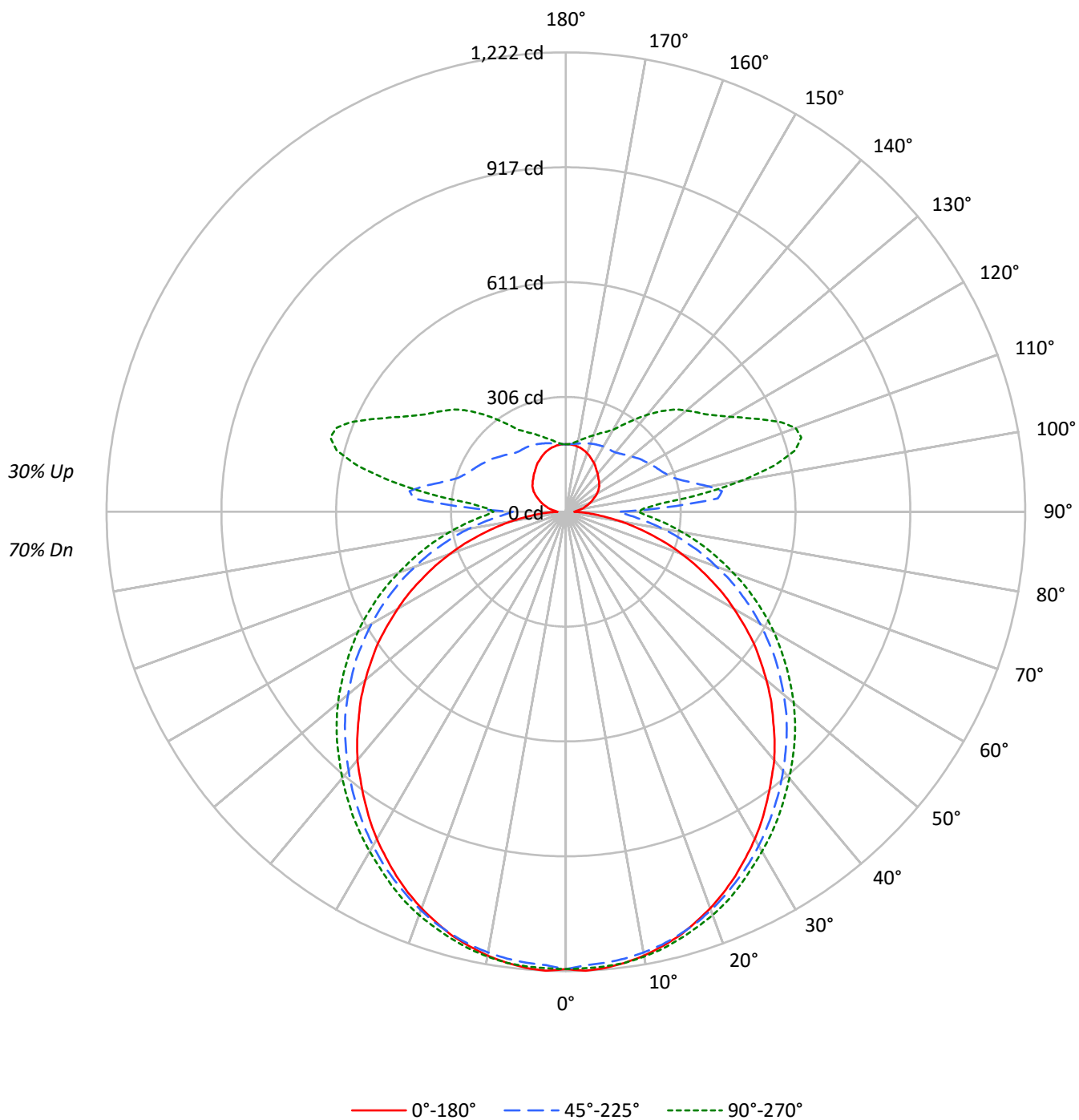
Lumens per Lamp: N/A
Luminaire Lumens: 5458.6 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	84	84	84	75	75	75
1	101	96	91	87	95	91	87	83	81	78	75	72	70	67	64	62	60
2	91	83	76	70	86	78	72	67	70	65	61	62	59	55	55	52	50
3	83	72	64	58	78	69	61	55	61	55	51	55	50	46	49	45	42
4	76	64	55	49	71	61	53	47	54	48	43	49	43	39	43	39	35
5	69	57	48	41	65	54	46	40	48	42	37	43	38	34	39	34	31
6	64	51	42	36	60	48	40	35	44	37	32	39	34	29	35	30	27
7	59	46	37	31	56	44	36	30	40	33	28	36	30	26	32	27	24
8	55	42	33	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	22	19
10	48	35	27	22	45	34	26	22	31	24	20	28	22	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	9.1
30°-40°	604.2	11.1
40°-50°	638.7	11.7
50°-60°	601.1	11.0
60°-70°	498.8	9.1
70°-80°	350.0	6.4
80°-90°	198.0	3.6
90°-100°	250.8	4.6
100°-110°	358.2	6.6
110°-120°	300.1	5.5
120°-130°	235.9	4.3
130°-140°	183.6	3.4
140°-150°	132.2	2.4
150°-160°	91.0	1.7
160°-170°	53.5	1.0
170°-180°	17.4	0.3
0°-30°	945.0	17.3
0°-40°	1549.1	28.4
0°-60°	2789.0	51.1
0°-90°	3835.9	70.3
90°-120°	909.1	16.7
90°-150°	1460.9	26.8
90°-180°	1623.0	29.7
0°-180°	5458.6	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°	22	79	141	182	193	16
95°	29	99	406	298	254	27
105°	54	99	321	622	631	58
115°	81	112	270	490	580	81
125°	107	124	243	401	452	95
135°	123	146	216	334	382	95
145°	140	159	202	261	291	88
155°	158	170	197	223	232	73
165°	172	177	189	200	203	49
175°	179	180	181	183	183	17
180°	180	180	180	180	180	

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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°	22.2	79.1	141.2	181.5	192.7
92.5°	25.3	95.2	264.9	210.6	207.9
95°	29.3	99.4	405.9	297.6	253.6
97.5°	35.7	96.4	419.2	437.6	366.0
100°	41.8	96.2	387.0	542.4	473.3
102.5°	48.9	97.2	350.2	604.0	568.0
105°	53.6	99.3	321.2	622.1	631.1
107.5°	61.7	102.9	300.0	607.4	656.7
110°	68.4	105.2	287.9	571.0	650.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	74.7	109.0	277.8	528.2	621.6
115°	80.8	111.6	270.3	490.4	579.9
117.5°	88.6	115.0	263.1	457.8	540.3
120°	95.0	117.0	256.3	433.4	505.4
122.5°	102.0	120.2	249.2	415.7	476.1
125°	106.6	124.4	243.3	401.3	452.3
127.5°	112.2	130.7	235.8	385.9	435.7
130°	115.5	135.5	228.7	370.5	419.0
132.5°	120.1	140.8	222.9	353.4	402.7
135°	122.9	145.9	215.8	333.5	382.1
137.5°	127.2	149.0	210.3	313.9	359.6
140°	131.8	153.0	205.8	294.8	336.8
142.5°	135.4	156.8	203.1	277.9	313.1
145°	140.0	158.7	202.4	260.7	291.1
147.5°	145.3	161.9	201.4	245.3	270.2
150°	150.2	164.8	200.3	235.9	251.8
152.5°	153.4	167.7	198.5	229.2	241.2
155°	157.6	170.2	196.8	222.9	232.4
157.5°	161.9	172.4	195.0	216.8	224.3
160°	165.7	174.4	192.9	210.9	216.9
162.5°	169.3	176.0	190.8	205.0	209.8
165°	171.7	177.0	188.7	199.8	202.8
167.5°	174.6	177.9	186.5	195.2	197.1
170°	176.3	178.6	184.4	190.6	191.8
172.5°	178.1	179.2	182.3	186.6	186.5
175°	179.1	179.5	180.9	183.4	182.7
177.5°	179.8	179.5	179.8	181.1	179.8
180°	179.5	179.5	179.5	179.5	179.5

(END OF REPORT)