

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: P1024935

Luminaire Tested: S124DIP-B1020D365UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024935
REPORT IS A COMBINATION OF REPORTS P995295 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D365UB50-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

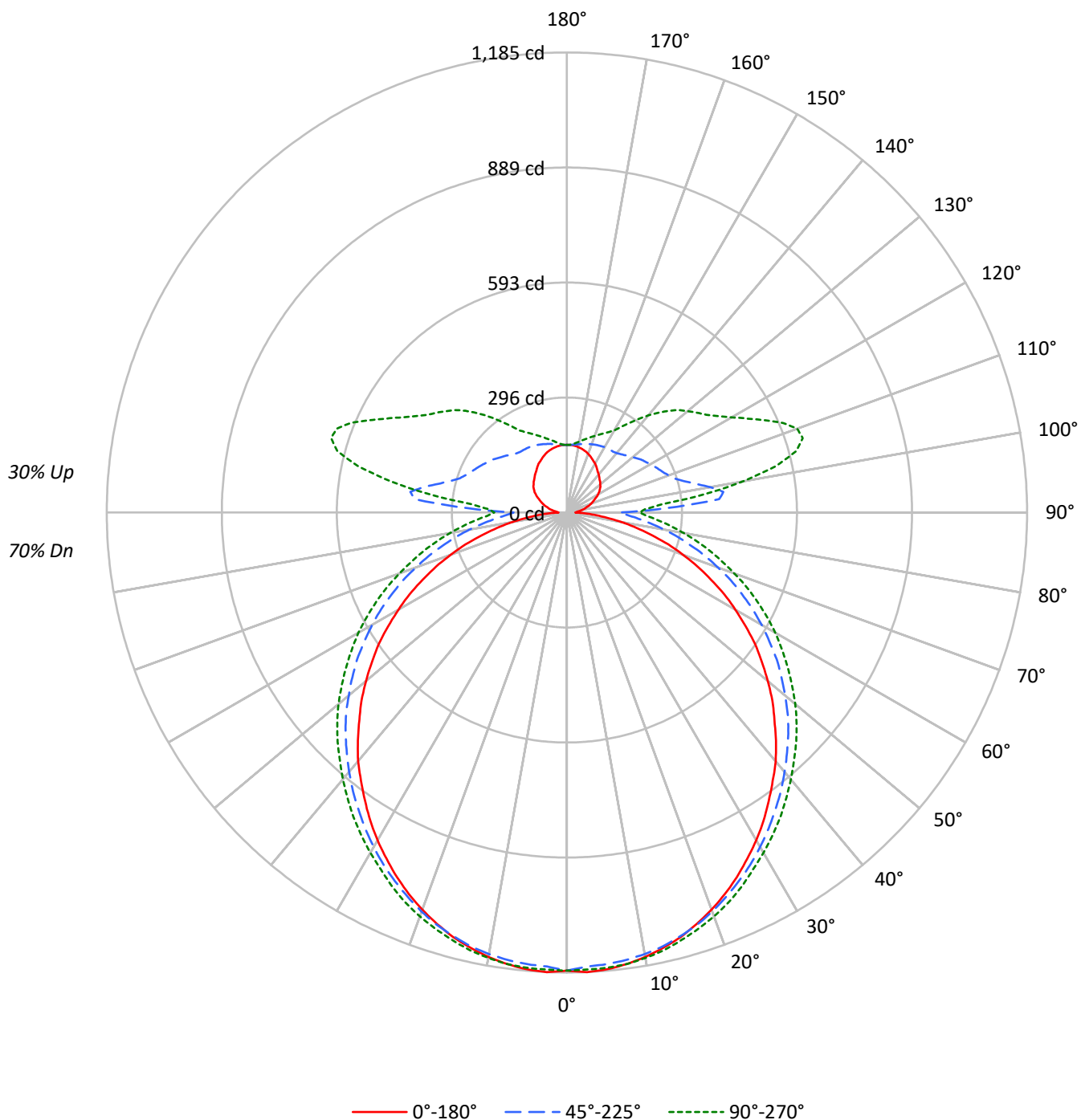
Lumens per Lamp: N/A
Luminaire Lumens: 5293.5 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
Input Voltage (V):
Input Current (A_{in}): 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			0
RW	70	50	30	10	70	50	30	10	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	75	75	75
1	101	96	91	87	95	91	87	83	81	78	75	72	70	67	64	62	60	60	60	56
2	91	83	76	70	86	78	72	67	70	65	61	62	59	55	55	52	50	50	50	46
3	83	72	64	58	78	69	61	55	61	55	51	55	50	46	49	45	42	42	42	38
4	76	64	55	49	71	61	53	47	54	48	43	49	43	39	43	39	35	35	35	32
5	69	57	48	41	65	54	46	40	48	42	37	43	38	34	39	34	31	31	31	28
6	64	51	42	36	60	48	40	35	44	37	32	39	34	29	35	30	27	27	27	24
7	59	46	37	31	56	44	36	30	40	33	28	36	30	26	32	27	24	24	24	21
8	55	42	33	28	52	40	32	27	36	30	25	33	27	23	29	25	21	21	21	19
9	51	38	30	25	48	36	29	24	33	27	22	30	25	21	27	22	19	19	19	17
10	48	35	27	22	45	34	26	22	31	24	20	28	22	19	25	21	17	17	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9622	9622	9622
5°	9649	9371	9388
10°	9586	9187	9160
15°	9496	8980	8904
20°	9363	8755	8654
25°	9213	8507	8386
30°	9052	8262	8112
35°	8868	8012	7867
40°	8720	7771	7614
45°	8503	7545	7391
50°	8318	7289	7155
55°	8126	7042	6883
60°	7829	6734	6628
65°	7501	6402	6320
70°	7103	6023	5965
75°	6550	5602	5627
80°	5923	5172	5272
85°	5094	4741	4985

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8503 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.8	2.1
10°-20°	320.3	6.1
20°-30°	484.4	9.1
30°-40°	586.0	11.1
40°-50°	619.5	11.7
50°-60°	583.0	11.0
60°-70°	483.8	9.1
70°-80°	339.5	6.4
80°-90°	192.1	3.6
90°-100°	243.2	4.6
100°-110°	347.3	6.6
110°-120°	290.9	5.5
120°-130°	228.7	4.3
130°-140°	178.0	3.4
140°-150°	128.2	2.4
150°-160°	88.2	1.7
160°-170°	51.9	1.0
170°-180°	16.9	0.3
0°-30°	916.5	17.3
0°-40°	1502.5	28.4
0°-60°	2705.0	51.1
0°-90°	3720.3	70.3
90°-120°	881.4	16.7
90°-150°	1416.3	26.8
90°-180°	1573.0	29.7
0°-180°	5293.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1180	1180	1180	1180	1180	
5°	1181	1177	1168	1179	1177	112
15°	1132	1134	1130	1142	1140	319
25°	1036	1044	1048	1062	1064	477
35°	906	922	936	954	958	568
45°	756	781	806	828	835	584
55°	592	620	659	686	694	528
65°	410	452	497	530	540	406
75°	227	276	332	369	381	241
85°	70	126	185	225	238	73
90°	21	77	137	176	187	15
95°	28	96	394	288	246	26
105°	52	96	312	603	612	56
115°	78	108	262	475	562	78
125°	103	121	236	389	438	93
135°	119	141	209	323	370	93
145°	136	154	196	253	282	85
155°	153	165	191	216	225	71
165°	166	172	183	194	197	47
175°	174	174	175	178	177	16
180°	174	174	174	174	174	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1180.0	1180.0	1180.0	1180.0	1180.0
2.5°	1185.3	1181.3	1170.7	1180.0	1178.6
5°	1181.3	1177.3	1168.1	1178.6	1177.3
7.5°	1173.4	1170.7	1162.8	1174.7	1173.4
10°	1162.8	1161.5	1154.9	1166.8	1165.4
12.5°	1148.3	1148.3	1144.3	1154.9	1154.9
15°	1132.4	1133.7	1129.8	1141.7	1140.3
17.5°	1111.3	1115.2	1113.9	1125.8	1124.5
20°	1088.8	1092.8	1094.1	1107.3	1107.3
22.5°	1063.7	1069.0	1071.6	1084.8	1087.5
25°	1035.9	1043.9	1047.8	1062.4	1063.7
27.5°	1005.6	1017.4	1022.7	1035.9	1037.3
30°	975.2	985.7	995.0	1009.5	1012.2
32.5°	942.1	955.3	965.9	983.1	985.7
35°	906.4	922.3	935.5	954.0	958.0
37.5°	870.8	889.3	905.1	923.6	927.6
40°	836.4	853.6	872.1	891.9	897.2
42.5°	796.8	816.6	839.1	861.5	865.5
45°	755.8	780.9	806.0	828.5	835.1
47.5°	717.5	742.6	771.7	794.1	802.1
50°	675.2	704.3	733.4	759.8	767.7
52.5°	632.9	662.0	696.4	722.8	730.7
55°	592.0	619.7	659.4	685.8	693.7
57.5°	545.7	580.1	618.4	650.1	656.7
60°	500.8	535.1	578.8	609.1	619.7
62.5°	457.2	495.5	539.1	569.5	580.1
65°	409.6	451.9	496.8	529.9	540.4
67.5°	364.7	409.6	457.2	490.2	500.8
70°	318.4	363.4	413.6	449.3	458.5
72.5°	273.5	319.8	373.9	408.3	418.9
75°	227.3	276.2	331.7	368.7	380.6
77.5°	183.7	235.2	293.3	330.3	343.6
80°	144.0	196.9	255.0	294.7	305.2
82.5°	104.4	159.9	218.0	259.0	270.9
85°	70.0	125.5	185.0	224.6	237.8
87.5°	43.6	97.8	155.9	194.2	206.1
90°	21.4	76.7	137.0	175.9	186.9
92.5°	24.6	92.4	256.9	204.2	201.6
95°	28.5	96.4	393.6	288.5	245.9
97.5°	34.7	93.6	406.5	424.4	354.9
100°	40.5	93.4	375.3	525.8	458.8
102.5°	47.3	94.2	339.6	585.6	550.6
105°	51.9	96.2	311.5	603.1	611.8
107.5°	59.8	99.8	290.8	588.8	636.7
110°	66.3	102.1	279.0	553.5	630.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	72.4	105.6	269.4	512.1	602.7
115°	78.3	108.2	262.1	475.4	562.2
117.5°	85.8	111.6	255.1	443.8	523.9
120°	92.1	113.5	248.5	420.0	490.0
122.5°	98.9	116.5	241.6	403.0	461.6
125°	103.4	120.6	236.0	389.1	438.5
127.5°	108.9	126.7	228.7	374.2	422.3
130°	112.0	131.4	221.7	359.2	406.2
132.5°	116.5	136.4	216.1	342.6	390.4
135°	119.2	141.4	209.2	323.2	370.5
137.5°	123.3	144.4	203.9	304.4	348.5
140°	127.7	148.3	199.5	285.8	326.5
142.5°	131.2	151.9	196.9	269.4	303.5
145°	135.6	153.8	196.2	252.7	282.2
147.5°	140.8	156.9	195.2	237.7	262.0
150°	145.6	159.8	194.2	228.7	244.1
152.5°	148.7	162.6	192.5	222.2	233.8
155°	152.8	165.0	190.8	216.0	225.3
157.5°	156.9	167.1	189.0	210.2	217.4
160°	160.7	169.0	187.0	204.4	210.2
162.5°	164.1	170.6	184.9	198.8	203.4
165°	166.5	171.6	182.9	193.6	196.6
167.5°	169.2	172.4	180.8	189.2	191.1
170°	170.9	173.1	178.8	184.8	186.0
172.5°	172.6	173.6	176.7	180.8	180.8
175°	173.7	174.0	175.4	177.8	177.1
177.5°	174.3	174.0	174.3	175.6	174.3
180°	174.0	174.0	174.0	174.0	174.0

(END OF REPORT)