

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: P1011336

Luminaire Tested: S123DIP-B1165D365UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011336
REPORT IS A COMBINATION OF REPORTS P989447 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D365UB27-4F0-XX-W2A-F4
Description: Define 3 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

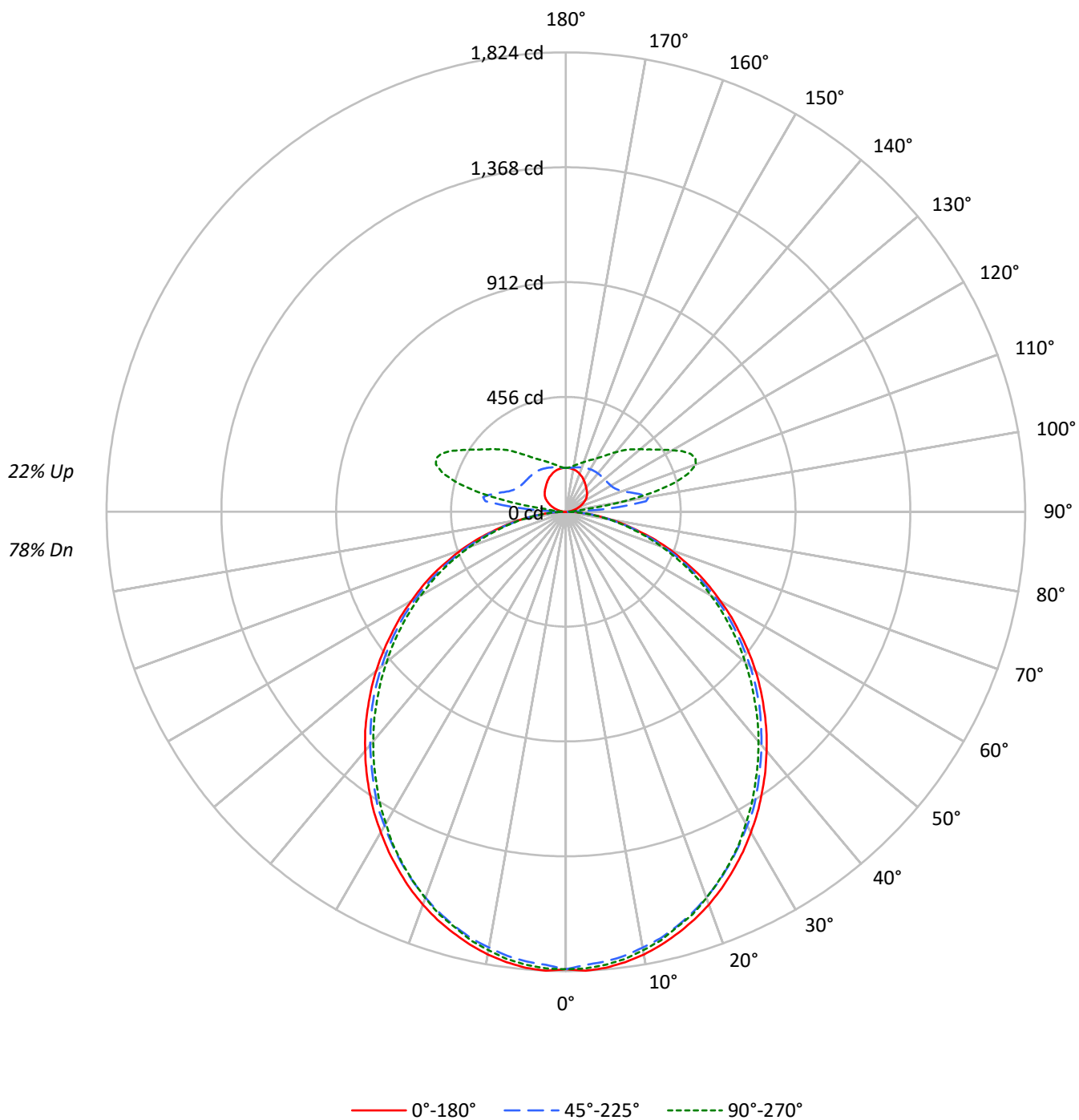
Lumens per Lamp: N/A
Luminaire Lumens: 6041.1 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
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	114	114	114	114	109	109	109	109	99	99	99	90	90	90	82	82	82
1	104	99	95	92	99	95	91	88	87	84	81	79	77	75	72	71	69
2	95	87	80	75	90	83	77	72	76	71	67	70	66	63	64	61	58
3	86	76	69	62	82	73	66	61	67	61	57	62	57	53	56	53	50
4	79	68	59	53	75	65	57	51	60	53	48	55	50	46	50	46	43
5	73	61	52	46	69	58	50	44	54	47	42	49	44	40	45	41	37
6	67	54	46	40	64	52	44	39	48	42	37	45	39	35	41	37	33
7	62	49	41	35	59	48	40	34	44	37	33	41	35	31	38	33	29
8	58	45	37	31	55	43	36	30	40	34	29	37	32	28	35	30	26
9	54	41	33	28	52	40	32	27	37	31	26	34	29	25	32	27	24
10	51	38	30	25	48	37	30	25	34	28	24	32	26	23	30	25	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19550	19550	19550
5°	19600	18876	18848
10°	19425	18237	18050
15°	19155	17572	17181
20°	18845	16834	16318
25°	18444	16057	15398
30°	18006	15251	14429
35°	17547	14428	13467
40°	17066	13565	12519
45°	16537	12723	11530
50°	15999	11785	10537
55°	15309	10807	9531
60°	14599	9730	8461
65°	13931	8563	7344
70°	12969	7269	6041
75°	11583	5755	4690
80°	10006	4046	3317
85°	7800	2175	1662

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16537 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	2.8
10°-20°	483.5	8.0
20°-30°	714.1	11.8
30°-40°	834.0	13.8
40°-50°	838.4	13.9
50°-60°	736.5	12.2
60°-70°	548.5	9.1
70°-80°	312.1	5.2
80°-90°	89.7	1.5
90°-100°	99.0	1.6
100°-110°	276.6	4.6
110°-120°	269.7	4.5
120°-130°	214.8	3.6
130°-140°	169.5	2.8
140°-150°	126.5	2.1
150°-160°	88.2	1.5
160°-170°	51.8	0.9
170°-180°	16.9	0.3
0°-30°	1368.8	22.7
0°-40°	2202.7	36.5
0°-60°	3777.6	62.5
0°-90°	4728.0	78.3
90°-120°	645.3	10.7
90°-150°	1156.1	19.1
90°-180°	1313.0	21.7
0°-180°	6041.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1816	1816	1816	1816	1816	
5°	1818	1810	1793	1808	1805	172
15°	1730	1724	1704	1716	1707	488
25°	1571	1562	1541	1543	1538	724
35°	1359	1349	1329	1320	1312	850
45°	1114	1107	1087	1068	1060	860
55°	845	843	823	806	798	757
65°	576	568	553	540	536	569
75°	304	298	294	286	281	325
85°	81	78	78	75	75	87
90°	1	4	9	10	10	6
95°	12	39	209	61	41	13
105°	41	60	283	496	448	43
115°	72	90	217	475	545	72
125°	100	119	202	367	430	89
135°	118	140	200	302	349	91
145°	134	154	197	248	272	84
155°	153	165	191	217	226	70
165°	167	172	183	194	197	47
175°	174	174	175	178	177	17
180°	174	174	174	174	174	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1816.3	1816.3	1816.3	1816.3	1816.3
2.5°	1824.1	1817.9	1800.7	1816.3	1814.7
5°	1817.9	1810.0	1792.9	1808.5	1805.4
7.5°	1803.8	1796.0	1778.8	1792.9	1791.3
10°	1785.1	1777.2	1756.9	1771.0	1767.9
12.5°	1760.1	1753.8	1735.1	1744.5	1742.9
15°	1730.4	1724.1	1703.8	1716.3	1707.0
17.5°	1697.6	1689.8	1669.5	1678.9	1675.7
20°	1660.1	1650.7	1630.4	1636.7	1632.0
22.5°	1618.0	1608.6	1588.3	1593.0	1586.7
25°	1571.1	1561.7	1541.4	1543.0	1538.3
27.5°	1522.7	1513.3	1491.5	1493.0	1488.3
30°	1469.6	1461.8	1439.9	1439.9	1429.0
32.5°	1416.5	1405.6	1389.9	1379.0	1374.3
35°	1358.7	1349.3	1329.0	1319.7	1311.9
37.5°	1300.9	1288.4	1268.1	1257.2	1252.5
40°	1240.0	1230.6	1208.8	1196.3	1190.0
42.5°	1179.1	1168.2	1146.3	1133.8	1127.6
45°	1113.5	1107.3	1087.0	1068.2	1060.4
47.5°	1049.5	1040.1	1021.4	1002.6	996.4
50°	983.9	976.1	955.8	938.6	929.2
52.5°	915.2	910.5	888.6	874.6	865.2
55°	844.9	843.3	823.0	805.9	798.0
57.5°	779.3	773.1	757.4	741.8	732.5
60°	707.5	705.9	687.2	673.1	665.3
62.5°	643.4	638.7	620.0	606.0	601.3
65°	576.3	568.5	552.9	540.4	535.7
67.5°	504.4	498.2	485.7	474.8	468.5
70°	440.4	431.0	421.7	410.7	402.9
72.5°	373.3	367.0	356.1	346.7	343.6
75°	304.5	298.3	293.6	285.8	281.1
77.5°	243.6	240.5	234.3	228.0	228.0
80°	184.3	179.6	176.5	174.9	174.9
82.5°	126.5	126.5	126.5	123.4	121.8
85°	81.2	78.1	78.1	75.0	75.0
87.5°	40.6	35.9	34.4	32.8	32.8
90°	0.7	4.2	8.8	9.8	10.2
92.5°	5.3	21.2	65.6	22.4	18.7
95°	12.0	39.0	209.1	61.0	40.9
97.5°	19.0	44.6	321.5	153.4	83.9
100°	26.1	49.2	333.9	320.8	221.0
102.5°	33.5	54.4	310.9	429.6	350.1
105°	40.9	60.4	283.4	495.7	448.4
107.5°	48.7	67.5	259.1	524.8	512.6
110°	57.1	74.8	239.0	525.6	549.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	64.9	82.4	225.6	505.8	556.7
115°	72.3	90.0	216.8	475.4	545.4
117.5°	79.7	97.5	210.8	443.0	520.7
120°	87.4	104.9	206.9	412.3	488.3
122.5°	94.1	112.0	204.5	388.2	458.0
125°	100.5	118.6	202.4	366.6	430.1
127.5°	105.4	125.0	201.3	349.0	406.1
130°	110.0	130.6	200.2	332.8	386.4
132.5°	113.5	135.7	199.9	317.6	367.0
135°	117.8	140.4	199.5	302.0	348.7
137.5°	121.6	144.4	198.8	287.2	329.3
140°	125.5	147.9	198.5	272.7	308.8
142.5°	129.7	151.0	197.8	259.4	289.8
145°	134.3	153.9	197.1	247.7	272.5
147.5°	138.9	156.9	196.0	238.5	257.7
150°	143.5	159.4	194.6	230.4	245.0
152.5°	148.1	162.0	192.8	223.4	234.4
155°	152.7	164.6	190.7	216.8	226.0
157.5°	156.2	167.0	189.0	210.4	217.9
160°	160.4	168.8	186.8	204.6	210.1
162.5°	163.6	170.3	184.7	199.1	203.1
165°	166.8	171.5	182.6	193.7	197.1
167.5°	169.2	172.6	180.5	189.0	191.1
170°	171.3	173.1	178.4	184.8	185.8
172.5°	172.7	173.6	176.6	181.0	180.9
175°	173.8	174.0	175.2	177.7	177.3
177.5°	174.5	174.2	174.2	175.6	174.9
180°	174.2	174.2	174.2	174.2	174.2

(END OF REPORT)