

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: P1031507

Luminaire Tested: S123DIW-B1165D460UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031507
REPORT IS A COMBINATION OF REPORTS P991090 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D460UB35-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

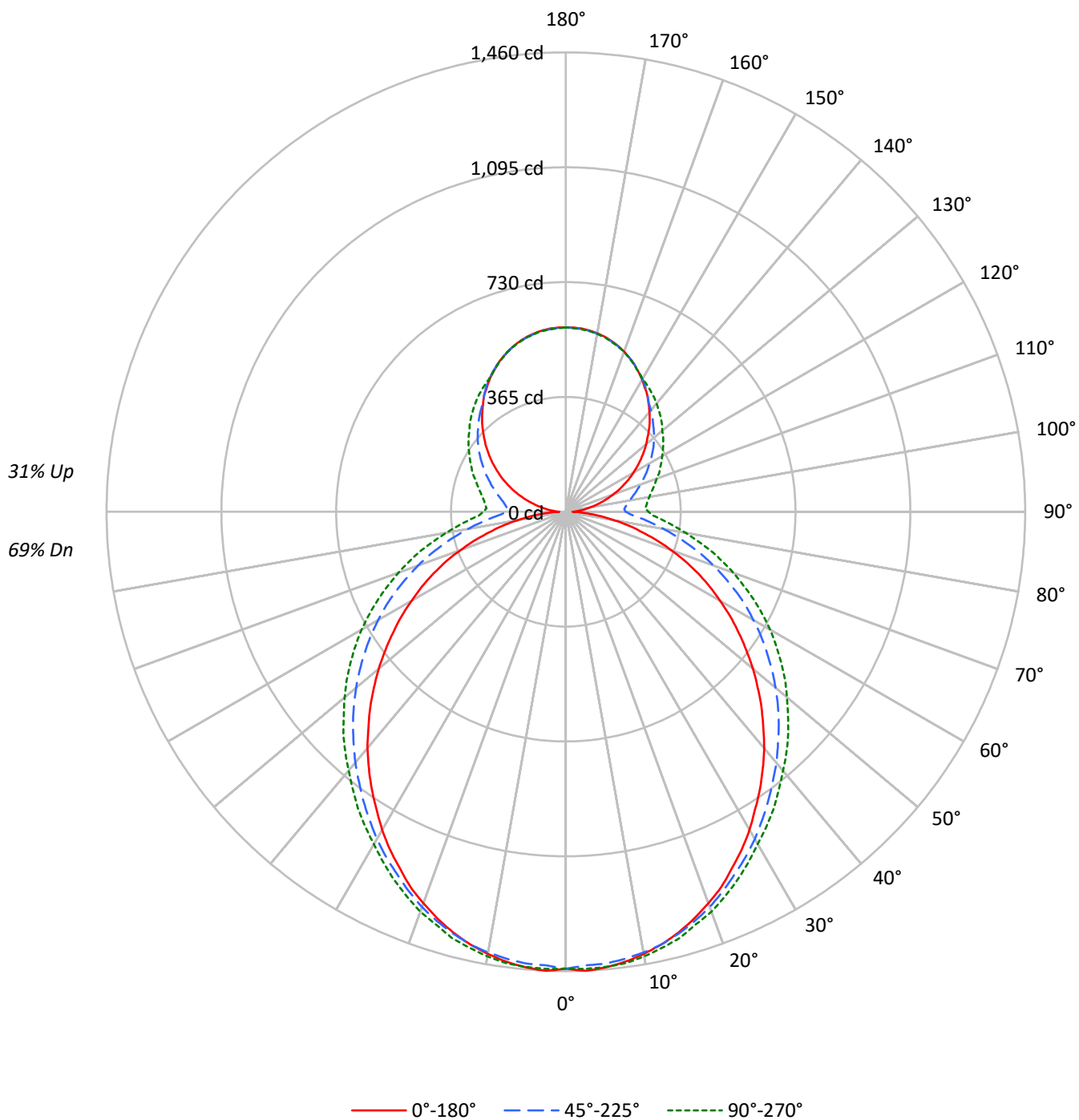
Lumens per Lamp: N/A
Luminaire Lumens: 6505.0 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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	105	105	105	105	94	94	94	83	83	83	73	73	73
1	101	95	91	87	95	90	86	82	80	77	74	71	69	66	63	61	59
2	91	83	76	70	85	78	72	67	69	65	60	62	58	54	54	51	49
3	83	72	64	58	78	68	61	55	61	55	50	54	49	45	48	44	41
4	76	64	55	48	71	60	52	46	54	47	42	48	43	39	42	38	35
5	69	57	48	41	65	54	46	40	48	41	36	43	37	33	38	34	30
6	64	51	42	36	60	48	40	34	43	37	32	39	33	29	34	30	26
7	59	46	37	31	55	44	36	30	39	33	28	35	30	26	31	27	23
8	55	42	33	28	52	40	32	27	36	29	25	32	27	23	29	24	21
9	51	38	30	25	48	36	29	24	33	27	22	30	24	21	27	22	19
10	48	35	27	22	45	33	26	22	30	24	20	27	22	19	25	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15632	15632	15632
5°	15675	15174	15162
10°	15529	14763	14650
15°	15323	14310	14108
20°	15032	13803	13526
25°	14672	13234	12922
30°	14306	12718	12317
35°	13893	12177	11822
40°	13500	11682	11301
45°	13063	11204	10872
50°	12632	10728	10406
55°	12154	10242	9976
60°	11687	9744	9537
65°	11204	9214	9022
70°	10484	8617	8492
75°	9567	7939	7945
80°	8502	7252	7320
85°	7444	6697	6873

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13063 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.8	2.1
10°-20°	392.8	6.0
20°-30°	587.3	9.0
30°-40°	701.2	10.8
40°-50°	733.7	11.3
50°-60°	688.5	10.6
60°-70°	575.1	8.8
70°-80°	411.2	6.3
80°-90°	245.9	3.8
90°-100°	191.5	2.9
100°-110°	227.1	3.5
110°-120°	269.7	4.1
120°-130°	298.6	4.6
130°-140°	306.6	4.7
140°-150°	286.4	4.4
150°-160°	237.8	3.7
160°-170°	158.3	2.4
170°-180°	55.4	0.9
0°-30°	1117.9	17.2
0°-40°	1819.1	28.0
0°-60°	3241.3	49.8
0°-90°	4473.6	68.8
90°-120°	688.3	10.6
90°-150°	1580.0	24.3
90°-180°	2031.0	31.2
0°-180°	6505.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1452	1452	1452	1452	1452	
5°	1454	1451	1441	1454	1452	138
15°	1384	1389	1388	1403	1402	390
25°	1250	1266	1270	1291	1291	576
35°	1076	1101	1122	1145	1152	673
45°	880	918	957	987	1000	678
55°	671	723	780	823	835	601
65°	464	525	595	642	658	458
75°	252	326	405	457	476	269
85°	78	157	240	294	310	80
90°	21	103	190	246	262	17
95°	44	110	191	242	257	43
105°	116	155	227	272	287	124
115°	203	224	280	318	330	202
125°	291	292	337	369	378	260
135°	374	376	393	419	426	289
145°	452	451	453	465	469	282
155°	516	516	516	518	515	237
165°	562	560	560	563	560	158
175°	584	582	582	585	582	56
180°	586	586	586	586	586	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1452.3	1452.3	1452.3	1452.3	1452.3
2.5°	1460.3	1455.5	1442.8	1455.5	1453.9
5°	1453.9	1450.8	1441.3	1453.9	1452.3
7.5°	1442.8	1442.8	1433.4	1449.2	1447.6
10°	1427.0	1430.2	1422.3	1438.1	1434.9
12.5°	1408.0	1412.8	1408.0	1422.3	1419.1
15°	1384.3	1389.1	1387.5	1403.3	1401.7
17.5°	1355.8	1365.3	1363.7	1378.0	1374.8
20°	1324.2	1333.7	1336.8	1351.1	1352.7
22.5°	1291.0	1300.5	1305.2	1324.2	1322.6
25°	1249.8	1265.7	1270.4	1291.0	1291.0
27.5°	1210.3	1227.7	1237.2	1254.6	1256.2
30°	1167.6	1188.1	1200.8	1219.8	1219.8
32.5°	1120.1	1143.8	1161.2	1181.8	1186.6
35°	1075.8	1101.1	1121.7	1145.4	1151.7
37.5°	1028.3	1056.8	1080.6	1107.4	1112.2
40°	980.9	1009.4	1041.0	1067.9	1074.2
42.5°	928.7	965.1	998.3	1028.3	1037.8
45°	879.6	917.6	957.2	987.2	999.9
47.5°	827.4	870.1	914.4	947.7	957.2
50°	776.8	821.1	870.1	906.5	917.6
52.5°	723.0	770.5	825.8	863.8	878.0
55°	670.8	723.0	780.0	822.7	835.3
57.5°	620.2	674.0	735.7	778.4	792.6
60°	566.4	623.3	688.2	732.5	749.9
62.5°	515.8	574.3	643.9	688.2	704.0
65°	463.5	525.2	594.9	642.3	658.1
67.5°	411.3	476.2	545.8	598.0	610.7
70°	356.0	424.0	499.9	550.6	566.4
72.5°	305.3	373.4	452.5	504.7	520.5
75°	251.5	325.9	405.0	457.2	476.2
77.5°	205.7	280.0	359.1	414.5	428.7
80°	156.6	234.1	316.4	370.2	386.0
82.5°	113.9	193.0	276.9	330.7	346.5
85°	77.5	156.6	240.5	294.3	310.1
87.5°	47.5	126.6	207.3	261.0	276.9
90°	21.1	103.2	189.8	245.5	262.2
92.5°	32.8	103.6	185.4	239.0	252.4
95°	44.5	109.5	190.6	241.6	257.4
97.5°	60.4	119.7	196.8	246.6	261.9
100°	76.8	130.2	205.2	252.5	269.2
102.5°	96.0	141.7	216.0	261.7	277.1
105°	116.2	155.0	227.3	271.6	286.7
107.5°	138.5	172.2	238.9	283.0	296.8
110°	159.0	188.4	252.7	295.6	307.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	182.0	204.6	264.8	306.6	320.9
115°	203.4	223.8	279.8	318.2	330.5
117.5°	226.9	240.1	292.9	330.8	342.2
120°	246.9	257.6	307.5	343.4	353.6
122.5°	269.5	274.5	322.6	356.0	365.7
125°	290.9	292.2	337.2	368.6	377.8
127.5°	312.0	313.3	351.9	380.8	390.0
130°	333.2	335.4	365.6	393.8	400.1
132.5°	352.8	356.5	379.3	405.5	414.2
135°	374.5	375.6	392.6	419.2	426.2
137.5°	394.3	395.0	407.4	430.4	437.0
140°	413.4	415.7	420.8	444.2	448.8
142.5°	432.2	432.9	433.8	454.0	459.6
145°	452.0	451.3	452.7	464.9	469.4
147.5°	467.4	469.3	470.6	475.3	479.0
150°	485.4	486.3	487.2	487.2	487.6
152.5°	500.1	501.5	501.9	502.9	500.5
155°	515.7	515.7	516.2	518.0	514.8
157.5°	529.1	528.6	529.1	530.9	528.2
160°	541.5	540.6	540.6	542.9	541.0
162.5°	552.5	551.2	551.6	553.9	550.7
165°	561.7	560.4	560.4	563.1	559.9
167.5°	569.6	567.7	568.2	570.9	568.2
170°	576.0	574.2	574.2	577.4	574.2
172.5°	581.1	579.2	579.2	582.0	578.8
175°	584.3	582.4	582.4	585.2	582.0
177.5°	586.1	584.3	584.3	587.0	583.8
180°	585.7	585.7	585.7	585.7	585.7

(END OF REPORT)