

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P960492

Luminaire Tested: **NAV-SB1C-830-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960492
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-830-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5882.5 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 54.4
Input Voltage (V): NR
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

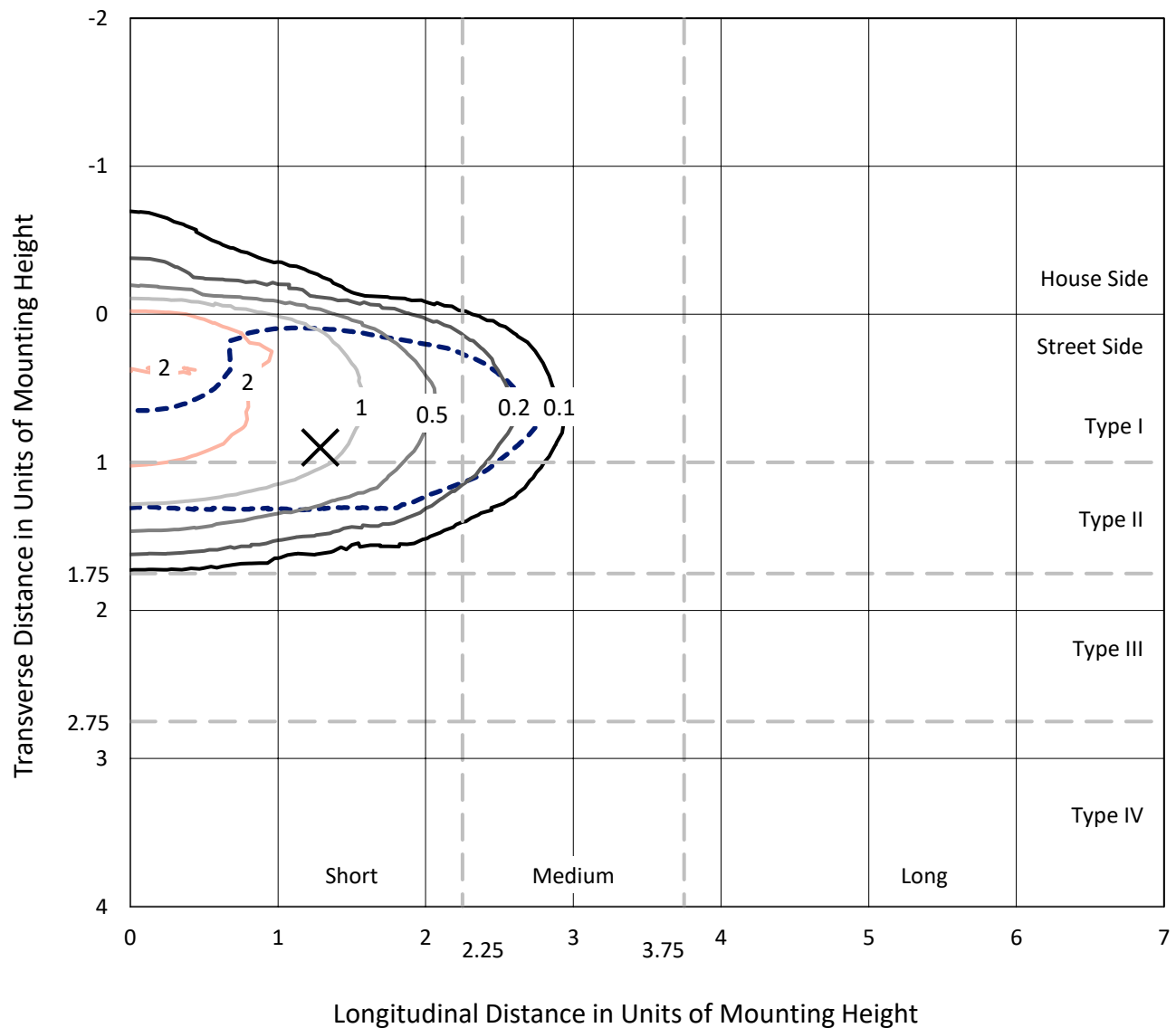


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Iso-Footcandle Lines of Horizontal Illumination

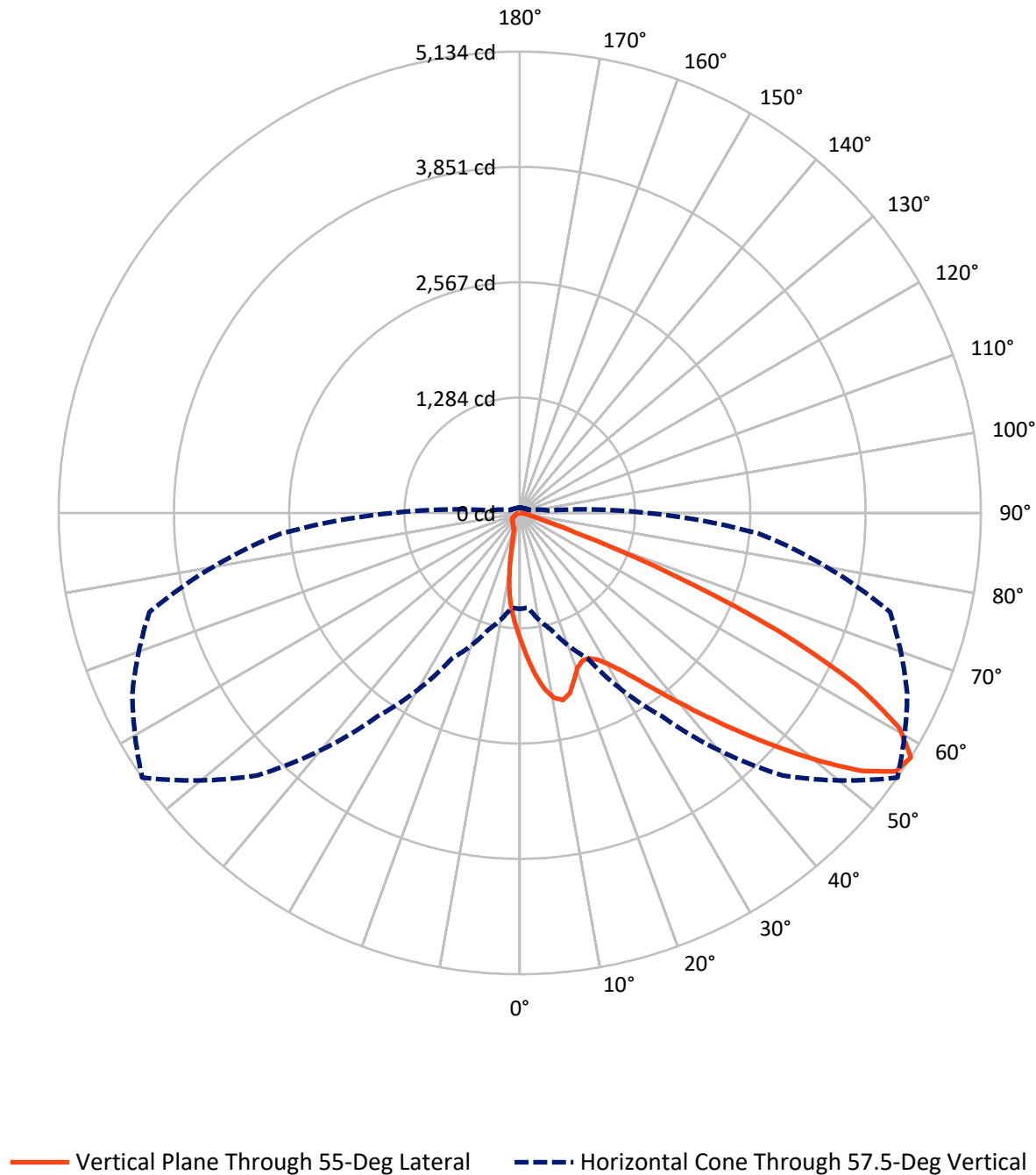
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	459.4	0.0	459.4
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	5423.1	0.0	5423.1
	% Fixture	92.2	0.0	92.2
Total	Lumens	5882.5	0.0	5882.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	2.2
10°-20°	318.6	5.4
20°-30°	509.7	8.7
30°-40°	862.8	14.7
40°-50°	1416.5	24.1
50°-60°	1556.8	26.5
60°-70°	893.0	15.2
70°-80°	182.5	3.1
80°-90°	10.8	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5882.5	100.0
0°-180°	5882.5	100.0

Coefficient of Utilization



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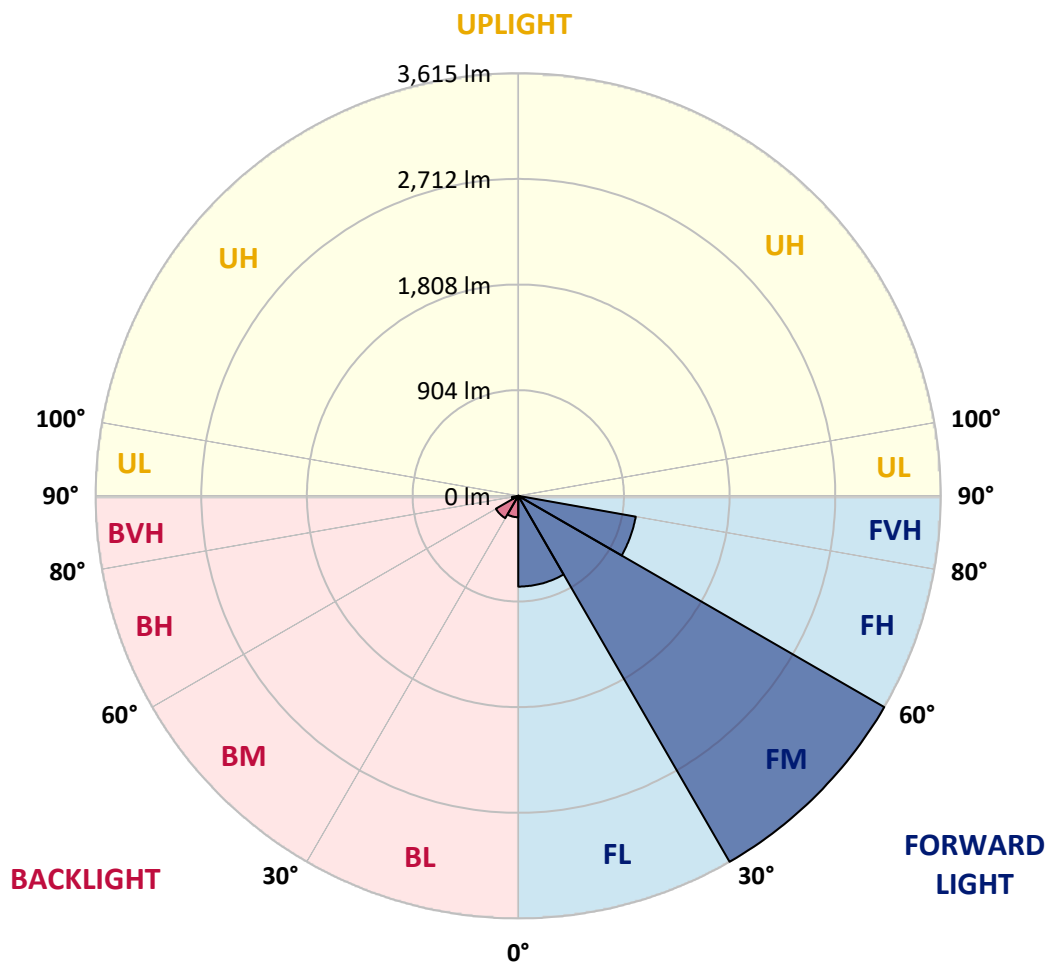
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	776.8	13.2			
FM	(30°-60°)	3615.4	61.5			
FH	(60°-80°)	1020.8	17.4			G1/1800
FVH	(80°-90°)	10.0	0.2			G1/100
BL	(0°-30°)	183.4	3.1	B1/500		
BM	(30°-60°)	220.6	3.8	B1/1000		
BH	(60°-80°)	54.6	0.9	B0/110		G0/110
BVH	(80°-90°)	0.7	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1417.6	1417.6	1417.6	1417.6	1417.6	1417.6	1417.6	1417.6	1417.6	1417.6	1417.6
2.5°	1758.9	1736.8	1733.5	1729.1	1687.0	1655.5	1609.8	1559.7	1503.5	1446.2	1420.8
5°	2032.0	2014.5	2011.4	1991.0	1943.1	1889.5	1808.2	1705.5	1600.7	1477.3	1424.4
7.5°	2085.0	2081.7	2096.5	2095.8	2089.3	2046.8	1978.4	1856.1	1698.6	1515.9	1433.9
10°	1848.8	1857.2	1901.4	1940.2	2045.1	2106.0	2091.1	1990.2	1799.5	1559.7	1444.3
12.5°	1633.7	1623.9	1655.5	1699.3	1821.2	2002.6	2137.9	2102.4	1914.8	1609.5	1460.0
15°	1498.8	1494.8	1512.6	1532.9	1625.8	1808.5	2083.5	2193.4	2025.8	1668.2	1483.6
17.5°	1455.6	1452.3	1457.8	1462.9	1523.0	1664.5	1954.0	2249.3	2132.1	1735.3	1509.6
20°	1490.8	1486.5	1485.7	1481.7	1506.7	1603.2	1836.8	2253.3	2227.5	1796.2	1532.2
22.5°	1593.5	1588.3	1570.6	1554.6	1556.8	1611.6	1784.6	2213.4	2299.3	1853.2	1546.3
25°	1779.5	1771.2	1734.2	1680.5	1646.5	1669.6	1792.6	2160.8	2367.9	1897.8	1539.4
27.5°	2012.4	2001.5	1954.0	1874.2	1796.2	1767.9	1850.2	2124.5	2424.8	1931.9	1524.6
30°	2240.5	2226.4	2179.7	2117.5	2003.7	1914.5	1954.4	2140.4	2492.7	1967.4	1504.9
32.5°	2486.9	2473.4	2411.4	2334.5	2240.2	2120.1	2096.9	2218.4	2575.7	2017.1	1491.2
35°	2798.5	2777.3	2689.3	2584.4	2484.3	2362.8	2289.8	2353.0	2686.3	2092.9	1498.8
37.5°	3153.2	3124.9	3029.8	2885.2	2754.6	2618.5	2524.9	2538.0	2848.5	2194.5	1522.3
40°	3487.6	3461.8	3374.1	3237.7	3073.8	2908.7	2808.9	2779.9	3072.3	2318.1	1563.7
42.5°	3688.2	3665.0	3628.0	3570.3	3432.1	3263.8	3137.9	3075.2	3337.1	2466.1	1614.2
45°	3699.4	3679.1	3728.8	3795.9	3768.7	3656.7	3503.2	3388.2	3603.0	2605.1	1666.3
47.5°	3519.5	3505.7	3656.7	3891.0	4007.7	4054.9	3913.4	3675.1	3822.4	2704.9	1687.8
50°	3029.1	3024.1	3334.5	3764.7	4098.8	4403.8	4346.2	3942.2	3992.5	2756.3	1667.5
52.5°	2626.5	2608.0	2789.0	3360.7	3966.4	4587.4	4769.1	4204.0	4111.5	2766.2	1619.9
55°	1992.1	1975.8	2202.8	2684.6	3539.4	4522.1	5078.6	4474.2	4196.8	2741.2	1534.7
57.5°	1068.6	1058.4	1345.3	1786.8	2766.9	4130.3	5134.4	4760.0	4268.5	2674.7	1415.3
60°	416.0	414.2	521.6	866.9	1681.6	3360.3	4852.6	4931.6	4313.5	2593.1	1315.6
62.5°	251.7	257.2	274.6	389.2	742.8	2087.5	4202.9	4736.4	4343.6	2518.4	1233.3
65°	208.2	208.6	210.7	267.3	355.9	873.4	3164.1	4094.5	4269.3	2385.3	1116.4
67.5°	178.5	181.7	190.0	212.2	251.0	383.0	1821.6	3171.7	3817.0	2075.5	934.4
70°	140.7	145.1	155.6	174.5	193.7	239.7	673.2	2110.4	2915.9	1564.5	706.6
72.5°	118.6	118.3	123.7	141.9	153.8	168.7	259.0	1182.4	1694.6	746.8	349.6
75°	91.7	95.4	102.3	118.6	125.9	122.3	140.4	432.0	607.2	226.3	119.0
77.5°	71.9	74.7	80.9	96.9	104.1	86.7	80.9	154.6	195.2	81.3	53.7
80°	32.3	34.8	55.1	71.4	84.9	59.9	43.9	79.0	86.7	37.0	27.2
82.5°	5.8	9.8	32.3	37.7	43.6	38.8	22.9	41.0	42.4	14.9	9.4
85°	0.4	0.7	11.3	13.7	17.4	12.7	6.9	16.3	14.1	5.1	3.6
87.5°	0.0	0.0	0.0	0.4	0.4	1.8	2.2	2.9	2.2	1.8	1.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1417.6	1417.6	1417.6	1417.6	1417.6	1417.6	1417.6	1417.6	1417.6	1417.6
2.5°	1394.7	1343.2	1293.1	1252.1	1228.2	1187.6	1160.7	1156.4	1145.1	1154.9
5°	1367.9	1275.7	1182.4	1099.1	1030.5	942.0	876.0	848.1	823.8	832.1
7.5°	1355.2	1209.7	1064.6	922.1	775.5	634.1	528.9	484.9	451.6	456.3
10°	1338.1	1141.1	913.7	696.1	499.8	360.2	287.6	260.8	245.9	246.3
12.5°	1325.0	1059.1	738.5	471.9	304.3	230.0	207.5	200.9	196.6	197.0
15°	1318.5	962.7	565.5	314.5	217.6	194.7	189.3	186.4	183.6	183.2
17.5°	1307.6	855.3	413.9	229.6	190.4	182.4	177.7	174.5	170.9	170.1
20°	1291.3	733.4	302.5	194.0	178.5	172.3	165.7	161.4	157.0	156.3
22.5°	1261.2	604.6	232.5	179.6	169.7	162.9	154.9	149.9	145.4	144.7
25°	1205.3	483.9	195.9	170.5	162.2	153.8	145.1	138.2	134.2	133.5
27.5°	1134.6	380.2	177.7	162.2	152.3	144.7	134.9	128.4	124.7	124.0
30°	1051.1	292.7	167.2	152.7	140.7	134.2	125.5	120.0	117.9	117.9
32.5°	961.2	234.0	162.9	143.3	130.6	123.3	116.4	114.3	113.6	113.2
35°	876.7	203.2	160.7	135.7	121.5	114.6	111.7	112.0	113.6	113.6
37.5°	801.7	193.3	159.6	130.2	113.6	107.3	109.2	112.4	111.0	111.0
40°	733.8	194.4	158.9	126.2	107.0	103.4	107.0	104.4	100.9	100.4
42.5°	681.9	203.5	157.4	123.0	103.0	100.4	99.0	95.0	94.7	95.4
45°	644.2	211.5	157.0	121.5	98.7	94.0	92.1	88.1	95.4	97.2
47.5°	599.6	211.5	157.0	116.4	91.4	89.6	86.7	82.3	89.6	91.4
50°	541.9	198.0	150.9	110.6	85.6	84.6	79.4	74.0	72.6	73.6
52.5°	469.0	173.7	135.3	102.6	79.8	77.6	71.4	67.4	66.4	66.4
55°	385.9	145.4	114.3	91.0	73.6	69.6	65.3	63.4	62.4	61.7
57.5°	313.8	119.3	91.7	80.9	67.9	62.7	61.3	59.1	57.3	56.3
60°	257.6	94.0	75.8	71.9	62.0	57.3	57.0	54.0	49.3	48.6
62.5°	198.7	68.9	63.9	62.4	56.3	52.3	51.6	45.7	38.4	37.0
65°	140.4	53.7	51.6	54.7	50.0	46.4	44.6	35.9	28.3	27.2
67.5°	98.7	45.0	40.6	47.9	43.6	38.8	37.7	30.4	23.6	22.9
70°	70.4	36.6	33.4	41.0	34.8	34.1	31.9	25.4	19.3	18.4
72.5°	49.7	27.9	25.7	35.6	24.0	29.4	26.1	19.6	14.6	13.7
75°	36.6	20.0	18.1	20.7	17.4	22.1	18.4	13.0	9.0	8.7
77.5°	26.9	12.7	10.9	10.1	10.1	13.7	10.1	5.4	4.0	3.6
80°	18.9	5.8	5.1	4.3	4.0	3.3	1.4	0.7	0.4	0.4
82.5°	11.3	2.6	2.6	1.8	1.1	0.0	0.0	0.0	0.0	0.0
85°	2.6	1.1	1.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)