

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: P960507

Luminaire Tested: **NAV-SB1C-830-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960507
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-830-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5841.5 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

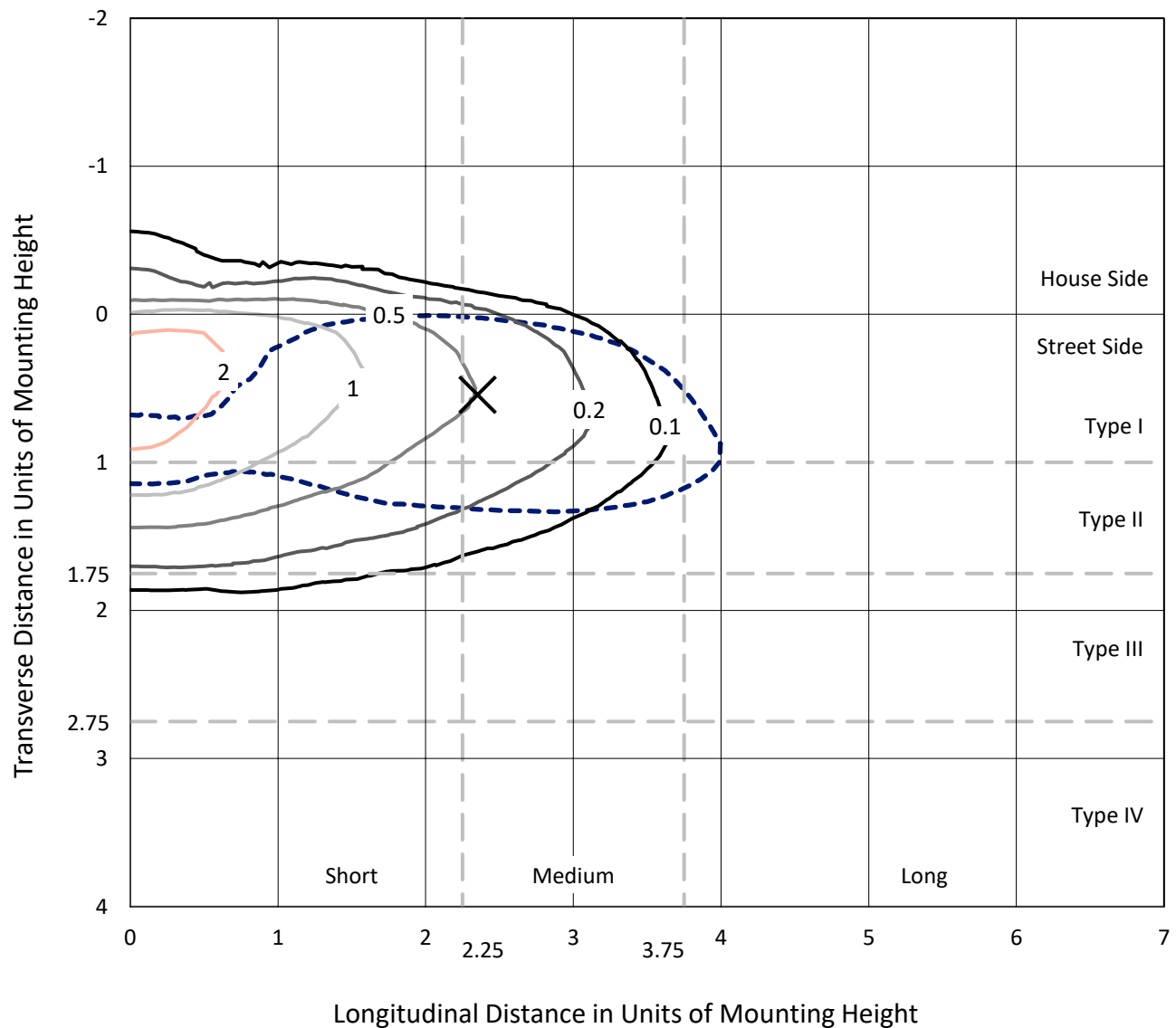
Input Watts (W): 54.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

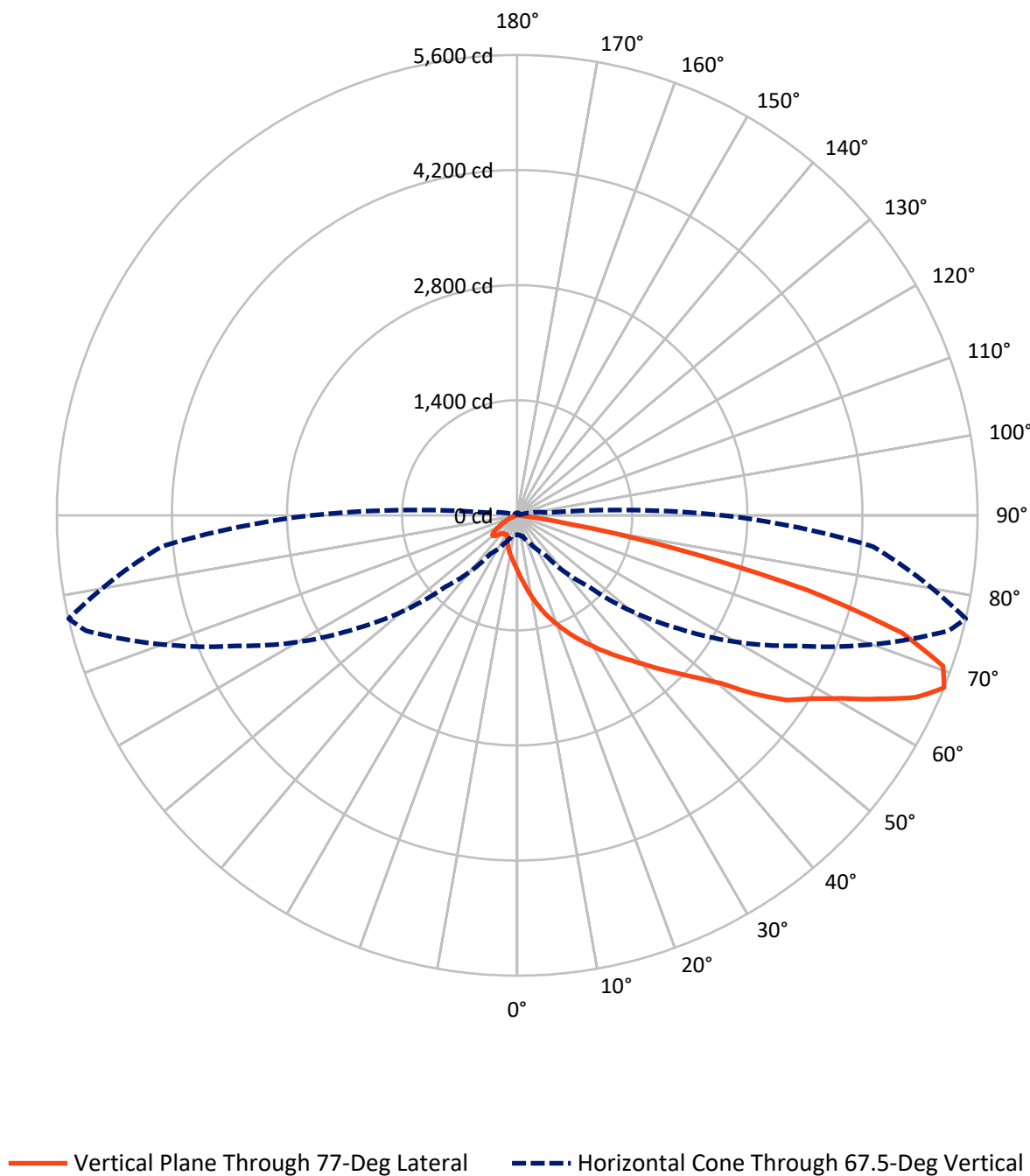
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	429.7	0.0	429.7
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	5411.7	0.0	5411.7
	% Fixture	92.6	0.0	92.6
Total	Lumens	5841.5	0.0	5841.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.8	1.2
10°-20°	240.8	4.1
20°-30°	464.6	8.0
30°-40°	806.6	13.8
40°-50°	1171.1	20.0
50°-60°	1344.9	23.0
60°-70°	1167.6	20.0
70°-80°	549.9	9.4
80°-90°	27.2	0.5
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°	5841.5	100.0
0°-180°	5841.5	100.0

Coefficient of Utilization



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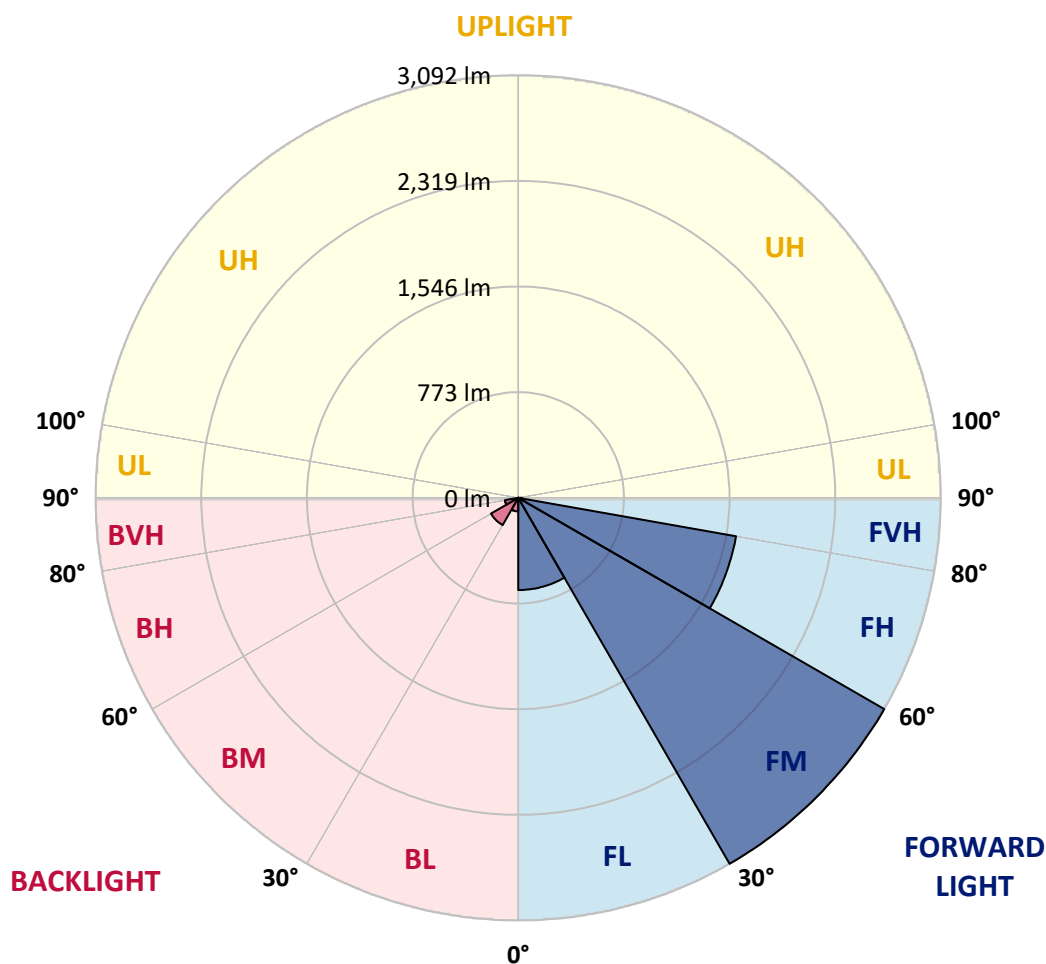
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	674.6	11.5			
FM	(30°-60°)	3092.3	52.9			
FH	(60°-80°)	1618.1	27.7			G1/1800
FVH	(80°-90°)	26.7	0.5			G1/100
BL	(0°-30°)	99.5	1.7	B0/110		
BM	(30°-60°)	230.3	3.9	B1/1000		
BH	(60°-80°)	99.5	1.7	B0/110		G0/110
BVH	(80°-90°)	0.5	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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6
2.5°	932.6	938.4	930.1	914.1	890.2	874.5	836.5	800.5	760.7	747.9	708.1
5°	1136.8	1142.0	1132.5	1115.1	1083.1	1052.7	1002.7	927.5	849.5	824.5	753.8
7.5°	1288.1	1291.0	1287.4	1271.4	1241.0	1206.4	1150.6	1061.7	946.1	918.5	810.0
10°	1396.9	1406.3	1405.3	1399.1	1378.7	1350.8	1291.4	1190.1	1054.1	1018.5	873.5
12.5°	1469.1	1479.6	1485.7	1499.6	1498.4	1480.7	1428.4	1321.4	1161.8	1120.1	944.9
15°	1490.1	1501.4	1525.0	1556.9	1585.2	1594.3	1557.6	1450.3	1280.4	1227.1	1018.2
17.5°	1478.2	1495.6	1523.9	1574.3	1636.3	1677.3	1673.3	1574.6	1388.2	1327.3	1090.0
20°	1504.6	1521.3	1543.4	1585.9	1658.0	1732.5	1762.2	1693.6	1495.2	1431.4	1165.5
22.5°	1651.2	1648.3	1650.5	1657.3	1700.5	1774.2	1835.5	1801.7	1601.2	1535.9	1245.3
25°	1883.3	1870.3	1848.2	1810.8	1799.9	1835.5	1899.3	1897.5	1712.9	1642.9	1326.9
27.5°	2149.6	2147.4	2095.5	2005.6	1954.8	1941.0	1971.5	1990.8	1823.5	1748.8	1408.9
30°	2404.6	2410.4	2340.4	2240.2	2147.1	2093.0	2065.5	2079.2	1935.9	1863.0	1493.4
32.5°	2626.6	2632.8	2556.6	2439.4	2324.1	2258.8	2200.8	2166.6	2058.5	1979.1	1586.3
35°	2814.1	2820.3	2732.9	2603.4	2480.4	2421.3	2355.7	2262.4	2181.9	2107.9	1689.6
37.5°	2981.7	2979.9	2862.7	2732.1	2611.4	2564.5	2530.1	2380.3	2308.8	2237.4	1804.3
40°	3080.7	3088.3	2988.3	2844.3	2727.1	2693.0	2690.8	2526.5	2455.4	2386.1	1929.8
42.5°	3109.7	3123.2	3050.6	2932.4	2826.1	2789.1	2846.0	2684.7	2625.8	2558.4	2071.6
45°	3057.6	3070.6	3037.6	2955.6	2893.6	2869.6	2979.6	2848.6	2808.0	2741.3	2231.5
47.5°	2905.2	2921.6	2929.4	2912.0	2911.3	2935.7	3099.3	3021.3	3024.2	2956.0	2417.0
50°	2610.3	2637.8	2711.1	2772.8	2868.2	2987.9	3215.7	3208.5	3267.9	3209.2	2658.5
52.5°	2074.2	2113.3	2365.8	2534.4	2748.8	2978.1	3343.8	3508.8	3695.6	3609.6	2999.1
55°	1666.8	1666.8	1872.1	2187.7	2516.0	2913.6	3399.6	3703.9	3986.8	3966.5	3238.9
57.5°	1358.8	1375.1	1506.1	1785.0	2178.9	2759.7	3434.1	3826.5	4221.6	4206.7	3473.2
60°	838.7	873.8	1121.2	1396.6	1795.6	2485.8	3412.3	3950.6	4506.3	4518.3	3755.4
62.5°	472.3	485.3	595.6	1004.8	1396.2	2117.6	3245.8	4019.8	4870.5	4921.3	4046.4
65°	326.1	332.6	375.0	625.4	967.8	1686.0	2920.4	3976.7	5235.4	5338.1	4293.0
67.5°	236.9	240.2	266.6	381.9	574.2	1222.4	2410.4	3759.1	5428.8	5600.3	4340.2
70°	182.1	184.3	203.5	251.0	339.2	754.5	1750.6	3326.3	5288.8	5493.7	4098.6
72.5°	148.0	150.2	165.0	185.7	224.9	446.2	1061.0	2701.3	4670.6	4891.9	3489.2
75°	124.7	127.7	141.1	154.6	176.3	286.6	497.6	1881.2	3512.4	3657.5	2426.4
77.5°	69.3	63.9	114.6	128.0	148.7	181.3	232.9	1107.1	1967.2	2007.4	1076.7
80°	43.2	44.6	91.0	103.0	114.3	91.4	106.6	426.2	681.9	647.9	208.6
82.5°	2.6	5.8	70.0	74.3	78.3	39.2	40.3	144.7	164.3	150.9	37.0
85°	0.0	0.0	31.9	25.7	27.2	11.3	11.6	33.7	22.1	24.0	7.3
87.5°	0.0	0.0	0.0	0.7	0.0	1.1	2.2	2.9	1.1	1.4	2.6
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6
2.5°	682.6	657.3	605.8	555.3	514.3	476.3	449.1	423.3	410.3	409.5	408.8
5°	703.4	650.1	547.0	455.9	382.7	323.9	285.9	258.6	244.9	240.2	239.4
7.5°	732.4	652.2	495.5	368.9	282.6	232.2	210.4	201.7	198.7	195.5	194.7
10°	769.1	657.3	449.5	297.0	222.7	197.3	188.6	185.0	182.9	180.6	179.9
12.5°	810.0	662.0	403.7	246.6	195.9	182.9	176.6	172.3	169.4	166.9	166.2
15°	849.9	664.9	356.2	211.5	182.1	171.6	165.0	160.3	156.3	153.4	153.0
17.5°	889.4	668.9	311.6	190.4	170.9	160.3	153.9	148.0	144.7	141.4	141.1
20°	933.4	668.2	269.5	175.6	159.6	149.0	142.2	136.7	133.5	129.9	129.5
22.5°	974.0	664.5	232.5	162.9	148.0	137.9	130.2	124.7	121.6	118.6	118.3
25°	1020.8	661.6	201.7	151.3	137.1	127.0	118.6	113.6	109.9	107.4	107.0
27.5°	1065.7	657.3	179.2	140.7	126.6	116.8	108.9	103.0	99.7	98.0	98.0
30°	1110.0	656.2	170.9	130.6	117.2	107.4	99.4	94.0	91.4	90.7	90.3
32.5°	1163.3	659.1	174.5	127.0	108.4	98.7	91.0	87.0	84.6	84.6	84.6
35°	1220.3	658.4	179.9	130.2	102.7	90.0	84.2	81.6	79.0	79.0	79.0
37.5°	1291.7	659.5	184.3	135.7	100.4	82.7	79.4	76.2	74.7	74.7	74.7
40°	1398.4	695.4	182.1	140.4	99.7	77.6	71.1	70.0	68.9	68.9	68.9
42.5°	1529.0	773.4	185.0	140.7	99.4	74.0	65.3	67.4	64.9	64.6	64.2
45°	1671.9	858.6	203.5	133.1	99.0	72.2	62.4	64.9	61.0	61.0	61.0
47.5°	1813.7	943.1	222.3	122.3	98.0	71.9	59.9	58.4	57.3	57.7	57.7
50°	2009.2	1012.1	229.6	107.4	95.4	71.1	55.1	55.5	54.7	55.5	55.5
52.5°	2222.1	1026.5	220.9	90.7	88.1	68.9	51.9	53.3	53.0	53.7	53.7
55°	2354.9	1011.0	182.4	75.4	76.9	60.2	48.6	51.6	51.6	51.6	51.6
57.5°	2492.0	944.5	129.5	61.3	63.9	49.3	45.7	49.7	49.3	49.0	49.0
60°	2590.7	837.2	85.3	50.4	50.7	40.6	42.4	46.8	46.4	44.6	44.6
62.5°	2664.3	718.6	54.7	42.8	38.8	36.6	38.8	42.4	41.0	37.0	36.3
65°	2656.0	554.2	42.1	36.6	31.9	31.9	33.7	37.0	32.7	26.1	25.4
67.5°	2501.1	375.0	34.8	30.9	26.9	26.4	27.9	30.9	27.9	22.1	21.4
70°	2224.4	245.2	27.9	24.0	21.4	19.6	22.4	26.4	23.6	17.7	17.0
72.5°	1805.3	149.4	21.0	17.4	15.6	12.7	17.7	21.7	18.9	13.0	12.3
75°	1168.0	76.2	14.6	11.3	8.3	7.6	13.0	16.3	13.0	8.0	6.9
77.5°	446.9	31.9	8.0	5.1	4.3	3.6	7.3	9.8	5.4	1.8	1.4
80°	86.0	13.4	4.0	2.6	2.2	1.4	1.1	0.7	0.0	0.0	0.0
82.5°	14.9	4.3	1.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.8	0.0	0.0	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	0.0

(END OF REPORT)