

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: P882060

Luminaire Tested: **NAV-SB1D-730-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882060
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-730-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7591 lumens
Efficiency: N/A
Efficacy: 95.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

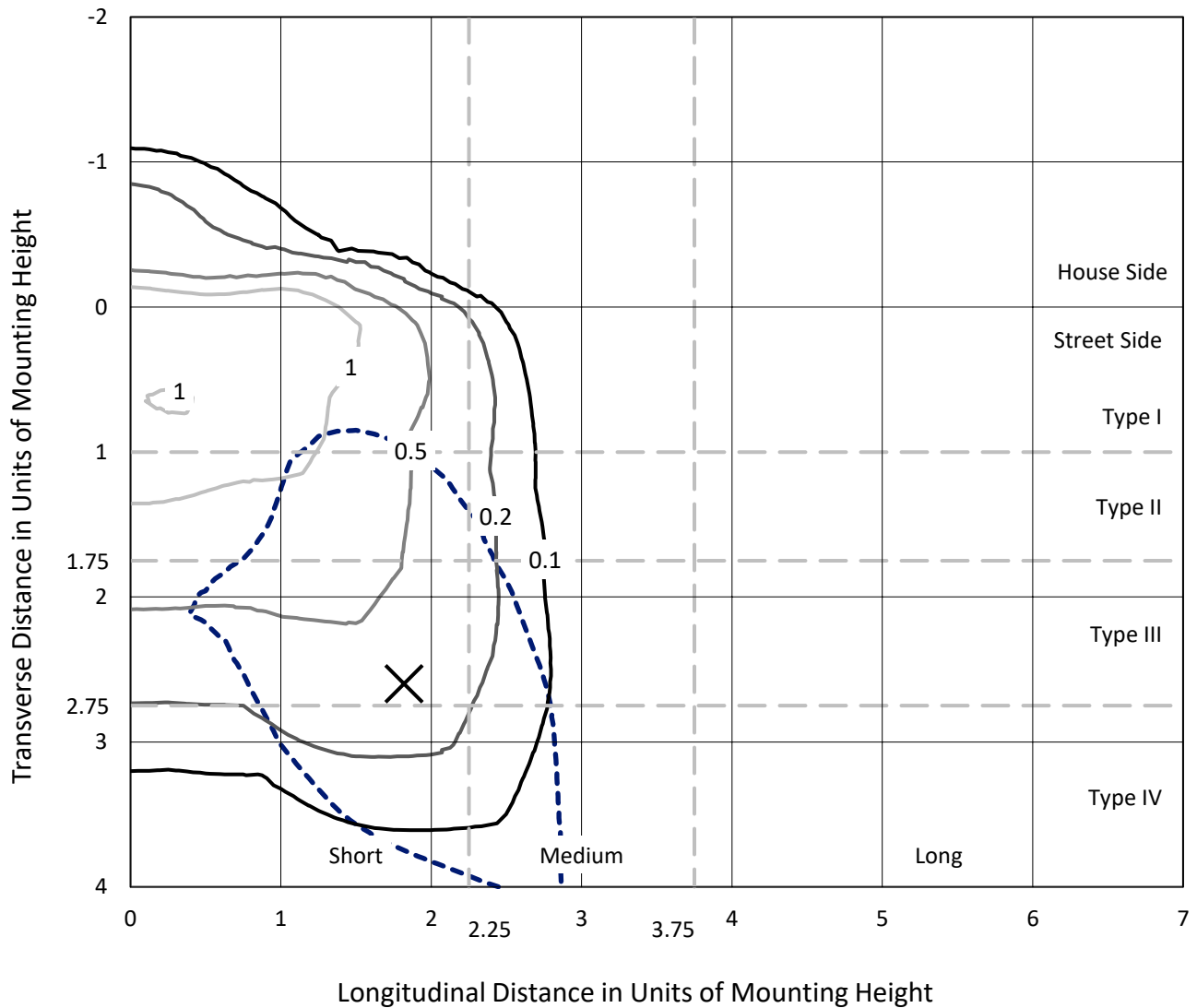
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

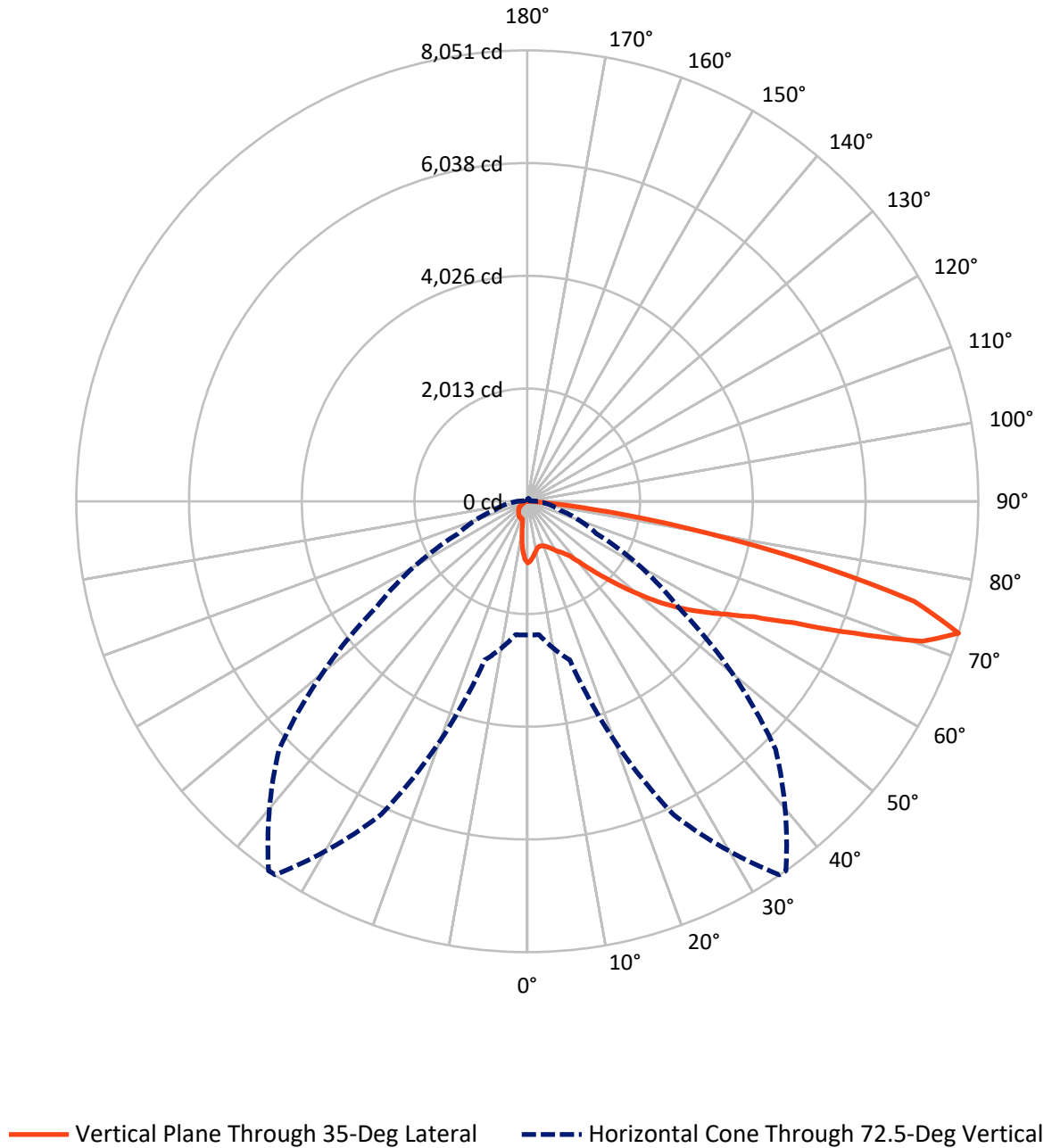
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	854.3	0.0	854.3
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	6736.7	0.0	6736.7
	% Fixture	88.7	0.0	88.7
Total	Lumens	7591.0	0.0	7591.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	1.2
10°-20°	211.5	2.8
20°-30°	343.6	4.5
30°-40°	573.2	7.6
40°-50°	1084.6	14.3
50°-60°	1723.4	22.7
60°-70°	2132.0	28.1
70°-80°	1325.2	17.5
80°-90°	107.1	1.4
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°	7591.0	100.0
0°-180°	7591.0	100.0

Coefficient of Utilization



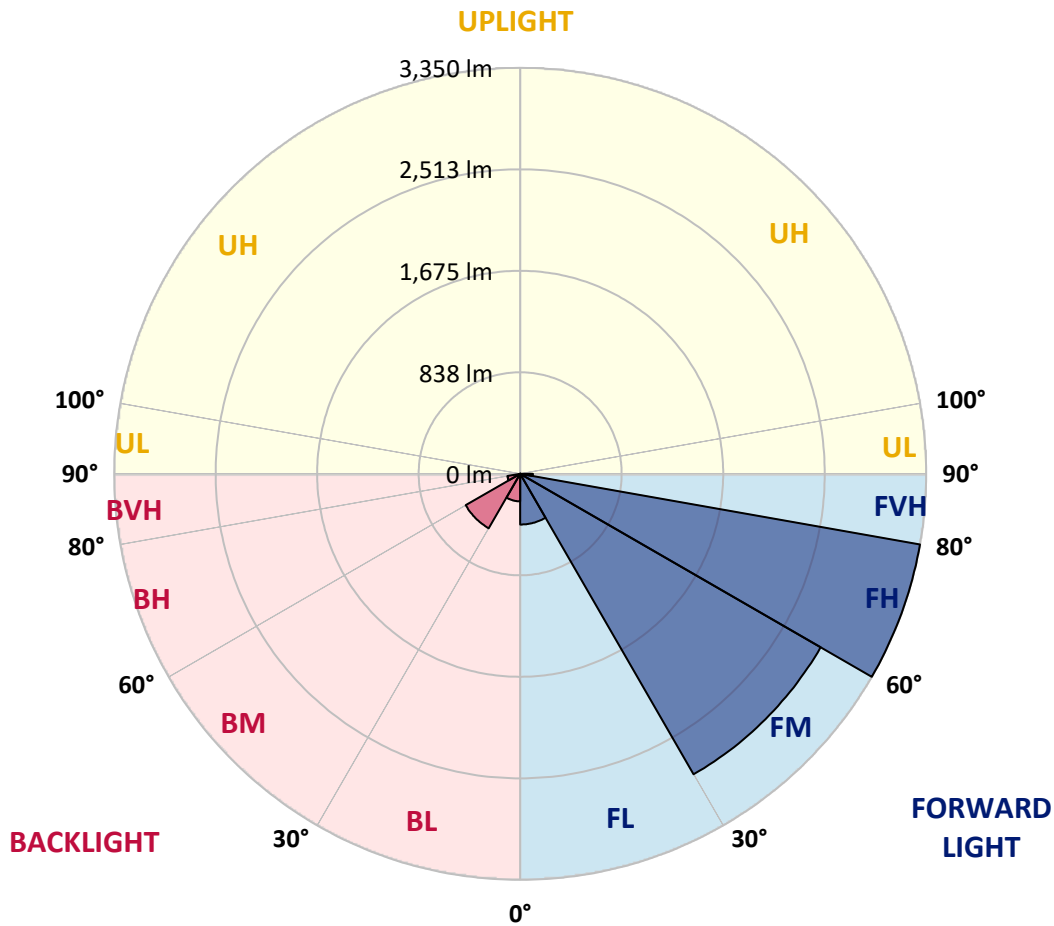
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	418.5	5.5			
FM (30°-60°)	2862.6	37.7			
FH (60°-80°)	3350.0	44.1			G2/5000
FVH (80°-90°)	105.6	1.4			G2/225
BL (0°-30°)	227.0	3.0	B1/500		
BM (30°-60°)	518.7	6.8	B1/1000		
BH (60°-80°)	107.2	1.4	B0/110		G0/110
BVH (80°-90°)	1.5	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-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2
2.5°	1051.2	1060.1	1061.8	1064.6	1064.6	1067.9	1073.5	1081.3	1094.1	1100.7	1105.2
5°	968.9	975.6	983.9	990.6	1003.4	1005.1	1026.8	1047.9	1077.4	1099.6	1115.2
7.5°	886.0	893.8	905.0	921.1	937.8	942.8	975.6	1011.2	1057.9	1099.6	1125.8
10°	827.6	828.2	838.2	854.3	881.0	887.2	927.2	977.8	1036.2	1093.0	1135.8
12.5°	794.8	798.7	803.2	815.4	841.0	844.9	887.7	947.2	1014.5	1089.1	1147.5
15°	794.8	797.6	800.4	806.5	827.1	830.4	868.2	927.8	1003.4	1090.7	1166.4
17.5°	803.2	807.6	805.4	812.6	834.3	836.5	869.9	922.2	1002.9	1101.3	1195.3
20°	823.2	826.5	822.1	826.5	848.2	852.7	887.2	932.8	1012.3	1119.7	1231.5
22.5°	854.9	856.6	846.0	849.3	871.6	877.1	917.2	962.8	1035.1	1149.1	1279.8
25°	894.9	898.3	882.2	886.0	907.2	913.9	960.0	1007.9	1071.3	1189.7	1341.6
27.5°	941.1	942.8	928.9	928.3	955.6	965.0	1011.8	1063.5	1119.7	1240.9	1419.5
30°	994.0	999.0	985.6	983.4	1017.9	1025.7	1071.8	1131.9	1190.9	1317.7	1530.1
32.5°	1035.7	1039.6	1031.8	1037.3	1072.4	1078.5	1144.7	1228.7	1302.7	1426.7	1680.9
35°	1095.7	1098.0	1080.2	1090.2	1130.2	1145.8	1244.2	1364.4	1443.4	1563.5	1877.8
37.5°	1313.2	1313.2	1237.6	1188.1	1226.5	1240.4	1380.5	1535.1	1616.9	1747.1	2125.8
40°	1614.1	1609.1	1498.4	1397.2	1392.2	1419.5	1574.6	1750.4	1841.1	1967.3	2405.1
42.5°	1935.1	1927.3	1776.5	1676.4	1659.7	1669.2	1798.8	2015.7	2108.0	2236.0	2705.4
45°	2219.8	2217.6	2079.7	1945.1	1915.0	1945.1	2078.6	2326.1	2392.3	2526.9	3005.2
47.5°	2458.5	2458.5	2357.8	2269.9	2254.3	2272.1	2457.4	2670.4	2664.3	2836.7	3297.2
50°	2733.2	2731.0	2635.3	2597.5	2613.6	2638.7	2893.4	3033.0	2945.7	3140.9	3558.1
52.5°	2925.7	2939.0	2906.2	2900.1	2982.4	3025.8	3336.2	3387.9	3197.7	3429.6	3753.3
55°	3078.1	3093.7	3131.5	3174.3	3332.8	3389.6	3765.0	3724.4	3408.5	3679.9	3865.7
57.5°	3293.9	3271.6	3330.1	3414.6	3671.0	3739.4	4180.5	4042.0	3578.1	3882.9	3877.9
60°	3555.9	3559.2	3569.2	3676.0	4008.6	4096.5	4589.9	4342.4	3687.1	4007.5	3742.2
62.5°	3870.7	3875.7	3896.3	4060.4	4461.9	4544.8	5025.9	4588.2	3737.2	3972.5	3391.8
65°	3849.0	3870.1	4099.9	4661.1	5151.1	5232.9	5534.9	4760.6	3661.6	3652.1	2761.6
67.5°	3506.4	3540.9	3925.2	5378.6	6190.1	6281.3	6150.1	4794.6	3335.1	2840.0	1801.6
70°	3056.9	3069.2	3531.4	6023.8	7393.2	7485.5	6700.7	4421.3	2530.8	1584.1	807.1
72.5°	2387.3	2390.0	2932.4	6173.4	8046.2	8051.2	6268.5	3282.2	1361.1	608.5	280.3
75°	1705.4	1688.7	1964.0	5006.5	7078.9	7135.7	4699.4	1539.6	520.1	287.6	139.6
77.5°	914.4	932.8	1111.3	2969.1	4890.2	4987.0	2564.1	443.9	264.8	195.8	92.3
80°	282.6	298.1	455.5	1359.4	2769.9	2828.3	950.6	197.5	184.7	139.6	60.6
82.5°	89.0	92.3	212.5	571.2	1149.7	1176.4	275.3	111.8	126.3	92.3	35.6
85°	25.6	26.1	94.6	213.0	284.2	289.8	77.3	43.4	72.3	57.3	18.4
87.5°	2.8	8.9	35.6	35.6	25.0	24.5	8.3	9.5	20.6	7.2	3.3
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°	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2
2.5°	1102.4	1103.0	1095.7	1083.5	1070.2	1059.0	1045.1	1034.0	1026.2	1024.0	1027.9
5°	1110.2	1106.3	1085.7	1048.5	1004.0	965.6	922.8	888.8	866.6	857.1	860.5
7.5°	1121.9	1110.8	1065.7	992.3	907.2	831.5	754.8	695.3	657.4	638.5	641.3
10°	1131.9	1109.6	1032.3	911.1	780.9	666.3	562.9	491.1	451.1	432.2	432.7
12.5°	1141.4	1109.1	988.9	814.9	638.5	498.4	402.1	366.5	355.4	351.5	350.4
15°	1159.1	1110.8	934.4	704.7	496.7	376.6	341.5	341.0	343.2	342.1	341.5
17.5°	1183.6	1112.4	872.7	587.9	383.2	332.1	330.4	335.4	338.7	337.1	336.5
20°	1215.3	1119.1	807.1	472.2	329.3	320.9	324.8	329.3	332.1	329.3	328.7
22.5°	1259.8	1130.8	735.3	379.3	312.0	314.3	317.6	322.6	325.4	321.5	320.9
25°	1314.3	1149.1	664.7	329.8	303.7	306.5	311.5	317.0	320.4	316.5	315.9
27.5°	1385.0	1178.6	599.6	318.7	295.3	297.0	304.2	312.6	317.0	312.0	312.0
30°	1487.3	1227.0	543.4	323.7	290.3	286.4	296.5	308.1	313.1	308.7	308.1
32.5°	1623.0	1295.4	508.9	331.5	288.1	274.2	283.7	298.7	307.0	304.2	304.2
35°	1801.0	1399.4	495.6	340.4	286.4	261.4	268.1	284.2	298.7	301.5	301.5
37.5°	2016.8	1544.0	499.5	344.3	281.4	250.9	254.2	268.1	287.0	295.9	298.1
40°	2262.1	1712.6	521.7	340.4	275.9	242.0	242.5	253.1	269.8	283.1	287.6
42.5°	2515.2	1909.5	562.9	325.9	270.9	234.2	232.5	239.7	250.9	260.3	264.2
45°	2756.0	2111.9	603.5	305.9	264.8	226.4	222.5	225.3	227.5	231.4	233.6
47.5°	2966.3	2254.3	591.8	287.6	256.4	217.5	210.8	209.7	203.0	202.5	201.9
50°	3111.5	2285.5	525.6	269.2	244.2	207.5	196.9	190.2	178.5	173.0	173.5
52.5°	3157.6	2162.6	429.4	250.9	224.2	194.1	179.1	168.5	154.1	149.1	148.5
55°	3096.4	1921.7	343.2	228.6	196.3	176.3	159.6	145.7	134.0	127.9	127.9
57.5°	2946.8	1615.2	271.4	202.5	166.9	156.3	139.6	125.7	115.7	109.6	108.5
60°	2698.7	1282.6	214.7	171.3	142.4	134.6	117.4	108.5	99.6	92.3	90.7
62.5°	2322.2	915.5	168.5	135.7	119.0	110.1	100.1	93.4	82.9	72.9	71.2
65°	1812.1	560.1	130.2	99.6	95.7	91.2	85.1	79.0	66.2	56.2	54.5
67.5°	1143.0	265.3	92.9	75.1	75.6	73.4	70.6	65.6	56.2	47.3	46.2
70°	503.4	128.5	61.2	57.3	56.2	56.2	58.4	56.7	47.8	39.5	37.8
72.5°	171.3	69.0	45.6	43.4	40.6	40.0	48.9	47.3	38.4	30.6	28.9
75°	89.6	46.2	33.4	31.1	24.5	29.5	38.9	36.7	27.3	20.0	18.4
77.5°	58.4	32.8	22.8	20.0	13.9	19.5	28.9	25.6	16.1	10.0	8.9
80°	36.7	21.7	13.3	9.5	6.7	10.6	15.6	11.1	6.1	2.2	1.7
82.5°	19.5	11.1	5.0	3.3	2.8	3.3	3.9	2.8	1.1	0.0	0.0
85°	7.8	3.9	1.7	1.1	0.6	0.0	1.1	0.6	0.0	0.0	0.0
87.5°	2.8	0.6	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)