

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: P882130

Luminaire Tested: **NAV-SB1D-835-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882130
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-835-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 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: 6506 lumens
Efficiency: N/A
Efficacy: 81.7 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

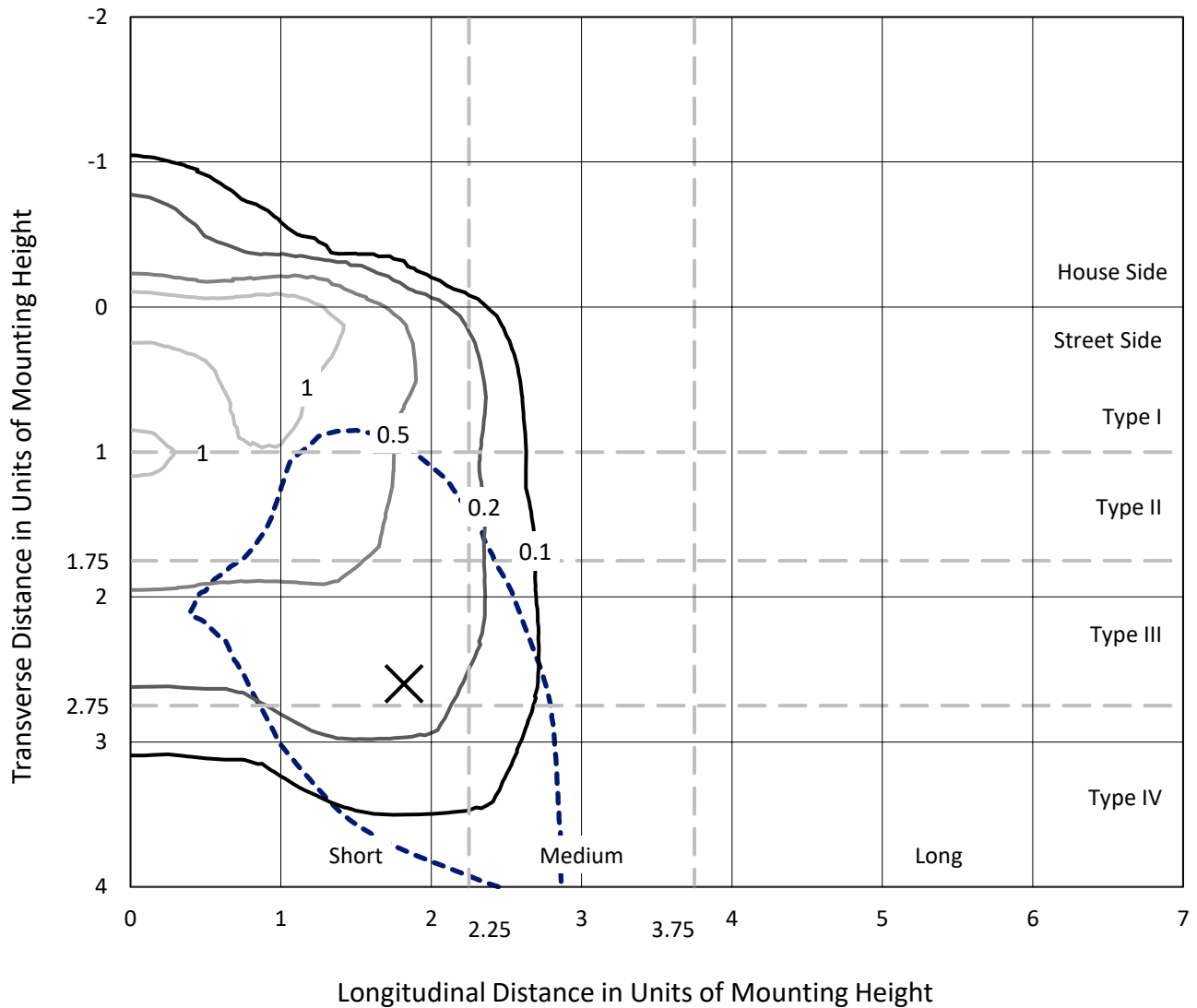
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

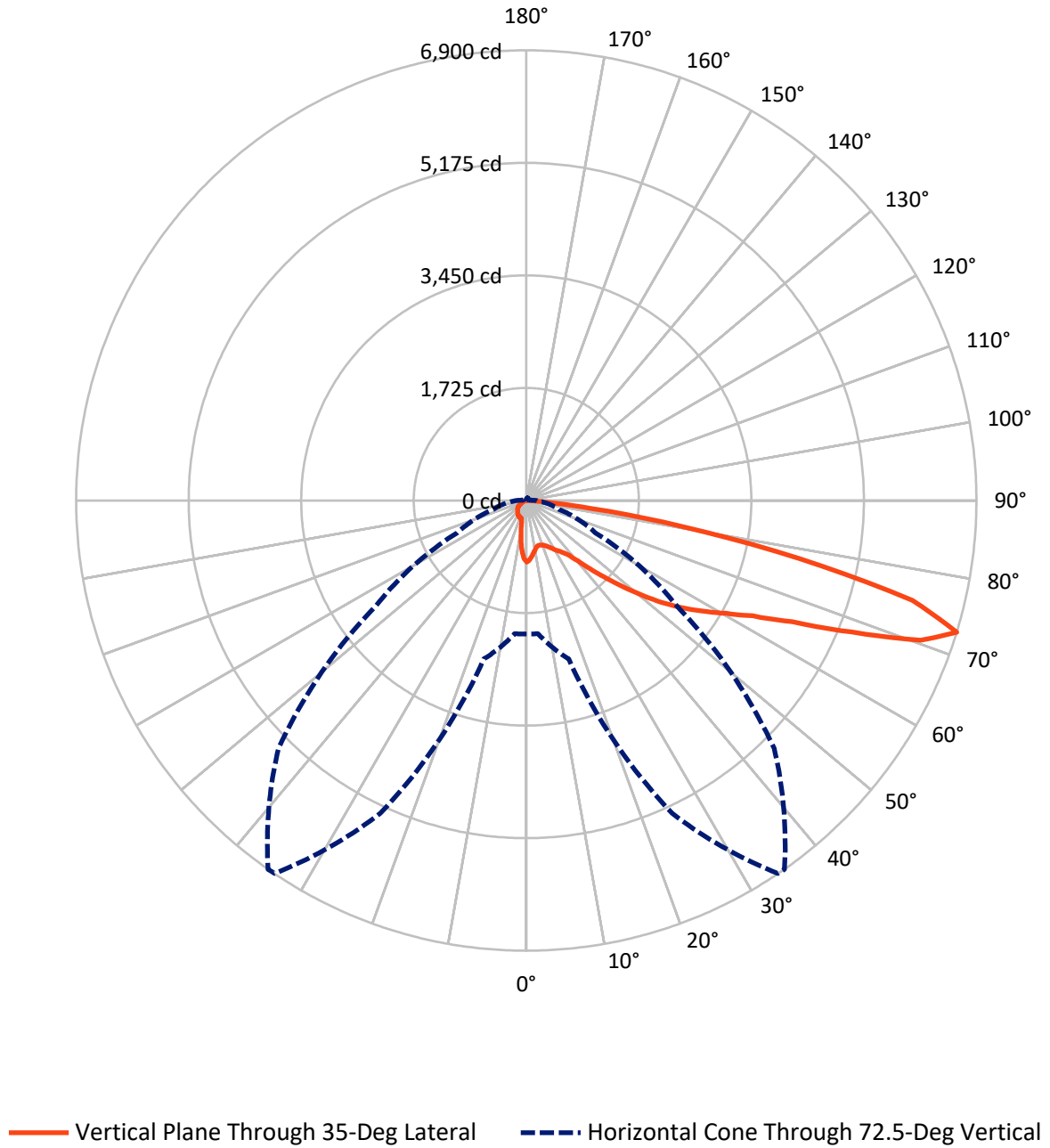
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 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	732.2	0.0	732.2
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	5773.8	0.0	5773.8
	% Fixture	88.7	0.0	88.7
Total	Lumens	6506.0	0.0	6506.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.5	1.2
10°-20°	181.3	2.8
20°-30°	294.5	4.5
30°-40°	491.3	7.6
40°-50°	929.6	14.3
50°-60°	1477.1	22.7
60°-70°	1827.2	28.1
70°-80°	1135.8	17.5
80°-90°	91.8	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°	6506.0	100.0
0°-180°	6506.0	100.0

Coefficient of Utilization



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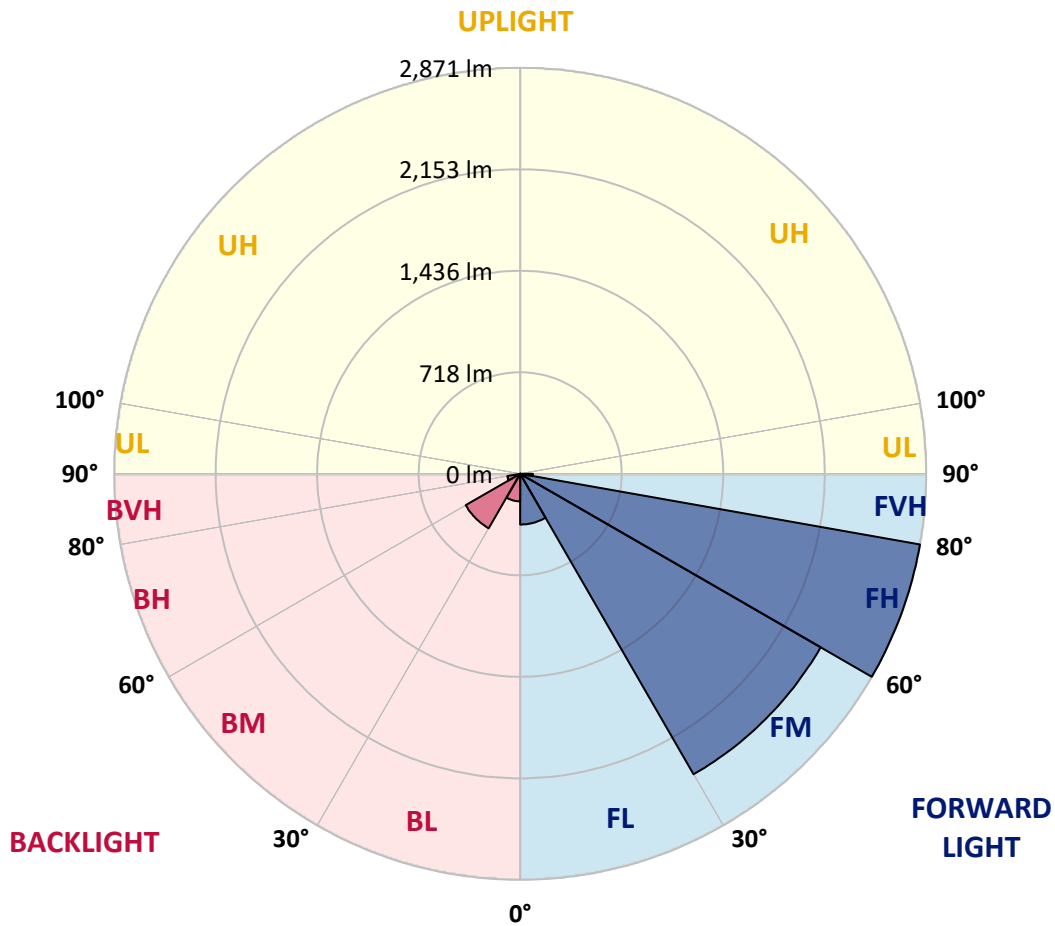
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	358.6	5.5			
FM (30°-60°)	2453.4	37.7			
FH (60°-80°)	2871.2	44.1			G2/5000
FVH (80°-90°)	90.5	1.4			G1/100
BL (0°-30°)	194.6	3.0	B1/500		
BM (30°-60°)	444.5	6.8	B1/1000		
BH (60°-80°)	91.9	1.4	B0/110		G0/110
BVH (80°-90°)	1.3	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°	942.9	942.9	942.9	942.9	942.9	942.9	942.9	942.9	942.9	942.9	942.9
2.5°	901.0	908.6	910.0	912.4	912.4	915.3	920.1	926.7	937.7	943.4	947.2
5°	830.4	836.2	843.3	849.0	860.0	861.4	880.0	898.1	923.4	942.5	955.8
7.5°	759.4	766.1	775.6	789.4	803.7	808.0	836.2	866.7	906.7	942.5	964.9
10°	709.3	709.8	718.4	732.2	755.1	760.4	794.7	838.1	888.1	936.7	973.4
12.5°	681.2	684.6	688.4	698.9	720.8	724.1	760.8	811.8	869.5	933.4	983.5
15°	681.2	683.6	686.0	691.2	708.9	711.7	744.1	795.2	860.0	934.8	999.7
17.5°	688.4	692.2	690.3	696.5	715.1	717.0	745.6	790.4	859.5	943.9	1024.5
20°	705.5	708.4	704.6	708.4	727.0	730.8	760.4	799.4	867.6	959.6	1055.4
22.5°	732.7	734.1	725.1	727.9	747.0	751.8	786.1	825.2	887.2	984.9	1096.9
25°	767.0	769.9	756.1	759.4	777.5	783.2	822.8	863.8	918.1	1019.7	1149.8
27.5°	806.6	808.0	796.1	795.6	819.0	827.1	867.1	911.5	959.6	1063.5	1216.6
30°	851.9	856.2	844.7	842.8	872.4	879.1	918.6	970.1	1020.6	1129.3	1311.4
32.5°	887.6	891.0	884.3	889.1	919.1	924.3	981.1	1053.1	1116.5	1222.8	1440.6
35°	939.1	941.0	925.8	934.4	968.7	982.0	1066.4	1169.4	1237.1	1340.0	1609.4
37.5°	1125.5	1125.5	1060.7	1018.3	1051.2	1063.1	1183.2	1315.7	1385.8	1497.4	1822.0
40°	1383.4	1379.1	1284.3	1197.5	1193.2	1216.6	1349.6	1500.2	1577.9	1686.1	2061.3
42.5°	1658.5	1651.8	1522.6	1436.8	1422.5	1430.6	1541.7	1727.6	1806.7	1916.4	2318.7
45°	1902.6	1900.7	1782.4	1667.1	1641.3	1667.1	1781.5	1993.6	2050.3	2165.7	2575.7
47.5°	2107.1	2107.1	2020.8	1945.5	1932.1	1947.4	2106.1	2288.7	2283.5	2431.2	2826.0
50°	2342.6	2340.7	2258.7	2226.2	2240.1	2261.5	2479.9	2599.5	2524.7	2692.0	3049.5
52.5°	2507.5	2518.9	2490.8	2485.6	2556.1	2593.3	2859.3	2903.7	2740.6	2939.4	3216.9
55°	2638.1	2651.5	2683.9	2720.6	2856.5	2905.1	3226.9	3192.1	2921.3	3153.9	3313.2
57.5°	2823.1	2804.0	2854.1	2926.5	3146.3	3204.9	3583.0	3464.3	3066.7	3327.9	3323.6
60°	3047.6	3050.5	3059.1	3150.6	3435.7	3511.0	3933.8	3721.7	3160.1	3434.7	3207.3
62.5°	3317.4	3321.7	3339.4	3480.0	3824.2	3895.2	4307.6	3932.4	3203.0	3404.7	2907.0
65°	3298.9	3317.0	3513.8	3994.9	4414.8	4484.9	4743.8	4080.2	3138.2	3130.1	2366.9
67.5°	3005.2	3034.8	3364.2	4609.8	5305.3	5383.5	5271.0	4109.3	2858.4	2434.1	1544.1
70°	2620.0	2630.5	3026.6	5162.8	6336.5	6415.6	5743.0	3789.4	2169.0	1357.7	691.7
72.5°	2046.1	2048.4	2513.2	5291.0	6896.1	6900.4	5372.6	2813.1	1166.5	521.5	240.3
75°	1461.6	1447.3	1683.3	4290.9	6067.1	6115.7	4027.7	1319.5	445.7	246.5	119.7
77.5°	783.7	799.4	952.5	2544.7	4191.3	4274.2	2197.6	380.4	226.9	167.8	79.1
80°	242.2	255.5	390.4	1165.1	2374.0	2424.1	814.7	169.2	158.3	119.7	52.0
82.5°	76.3	79.1	182.1	489.6	985.4	1008.2	236.0	95.8	108.2	79.1	30.5
85°	21.9	22.4	81.0	182.6	243.6	248.4	66.3	37.2	62.0	49.1	15.7
87.5°	2.4	7.6	30.5	30.5	21.5	21.0	7.2	8.1	17.6	6.2	2.9
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°	942.9	942.9	942.9	942.9	942.9	942.9	942.9	942.9	942.9	942.9	942.9
2.5°	944.8	945.3	939.1	928.6	917.2	907.7	895.7	886.2	879.5	877.6	881.0
5°	951.5	948.2	930.5	898.6	860.5	827.6	790.9	761.8	742.7	734.6	737.5
7.5°	961.5	952.0	913.4	850.5	777.5	712.7	646.9	595.9	563.5	547.3	549.6
10°	970.1	951.0	884.8	780.9	669.3	571.1	482.4	420.9	386.6	370.4	370.9
12.5°	978.2	950.6	847.6	698.4	547.3	427.1	344.7	314.2	304.6	301.3	300.3
15°	993.5	952.0	800.9	604.0	425.7	322.7	292.7	292.2	294.1	293.2	292.7
17.5°	1014.4	953.4	748.0	503.9	328.5	284.6	283.2	287.5	290.3	288.9	288.4
20°	1041.6	959.1	691.7	404.7	282.2	275.1	278.4	282.2	284.6	282.2	281.7
22.5°	1079.8	969.2	630.2	325.1	267.4	269.3	272.2	276.5	278.9	275.5	275.1
25°	1126.5	984.9	569.7	282.7	260.3	262.7	267.0	271.7	274.6	271.2	270.8
27.5°	1187.0	1010.2	513.9	273.2	253.1	254.6	260.8	267.9	271.7	267.4	267.4
30°	1274.7	1051.6	465.7	277.4	248.8	245.5	254.1	264.1	268.4	264.6	264.1
32.5°	1391.0	1110.3	436.2	284.1	246.9	235.0	243.1	256.0	263.1	260.8	260.8
35°	1543.6	1199.4	424.8	291.7	245.5	224.1	229.8	243.6	256.0	258.4	258.4
37.5°	1728.6	1323.4	428.1	295.1	241.2	215.0	217.9	229.8	246.0	253.6	255.5
40°	1938.8	1467.8	447.2	291.7	236.4	207.4	207.8	216.9	231.2	242.6	246.5
42.5°	2155.7	1636.6	482.4	279.4	232.2	200.7	199.3	205.5	215.0	223.1	226.4
45°	2362.1	1810.1	517.2	262.2	226.9	194.0	190.7	193.1	195.0	198.3	200.2
47.5°	2542.3	1932.1	507.2	246.5	219.8	186.4	180.7	179.7	174.0	173.5	173.0
50°	2666.7	1958.8	450.5	230.7	209.3	177.8	168.8	163.0	153.0	148.3	148.7
52.5°	2706.3	1853.5	368.0	215.0	192.1	166.4	153.5	144.4	132.0	127.8	127.3
55°	2653.9	1647.0	294.1	195.9	168.3	151.1	136.8	124.9	114.9	109.6	109.6
57.5°	2525.6	1384.4	232.6	173.5	143.0	134.0	119.7	107.7	99.2	93.9	93.0
60°	2313.0	1099.3	184.0	146.8	122.0	115.4	100.6	93.0	85.3	79.1	77.7
62.5°	1990.3	784.7	144.4	116.3	102.0	94.4	85.8	80.1	71.0	62.4	61.0
65°	1553.1	480.0	111.6	85.3	82.0	78.2	72.9	67.7	56.7	48.1	46.7
67.5°	979.6	227.4	79.6	64.4	64.8	62.9	60.5	56.3	48.1	40.5	39.6
70°	431.4	110.1	52.4	49.1	48.1	48.1	50.1	48.6	41.0	33.8	32.4
72.5°	146.8	59.1	39.1	37.2	34.8	34.3	42.0	40.5	32.9	26.2	24.8
75°	76.8	39.6	28.6	26.7	21.0	25.3	33.4	31.5	23.4	17.2	15.7
77.5°	50.1	28.1	19.5	17.2	11.9	16.7	24.8	21.9	13.8	8.6	7.6
80°	31.5	18.6	11.4	8.1	5.7	9.1	13.3	9.5	5.2	1.9	1.4
82.5°	16.7	9.5	4.3	2.9	2.4	2.9	3.3	2.4	1.0	0.0	0.0
85°	6.7	3.3	1.4	1.0	0.5	0.0	1.0	0.5	0.0	0.0	0.0
87.5°	2.4	0.5	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)