

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: P961601

Luminaire Tested: **NAV-SB2A-835-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961601
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-835-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6457.5 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

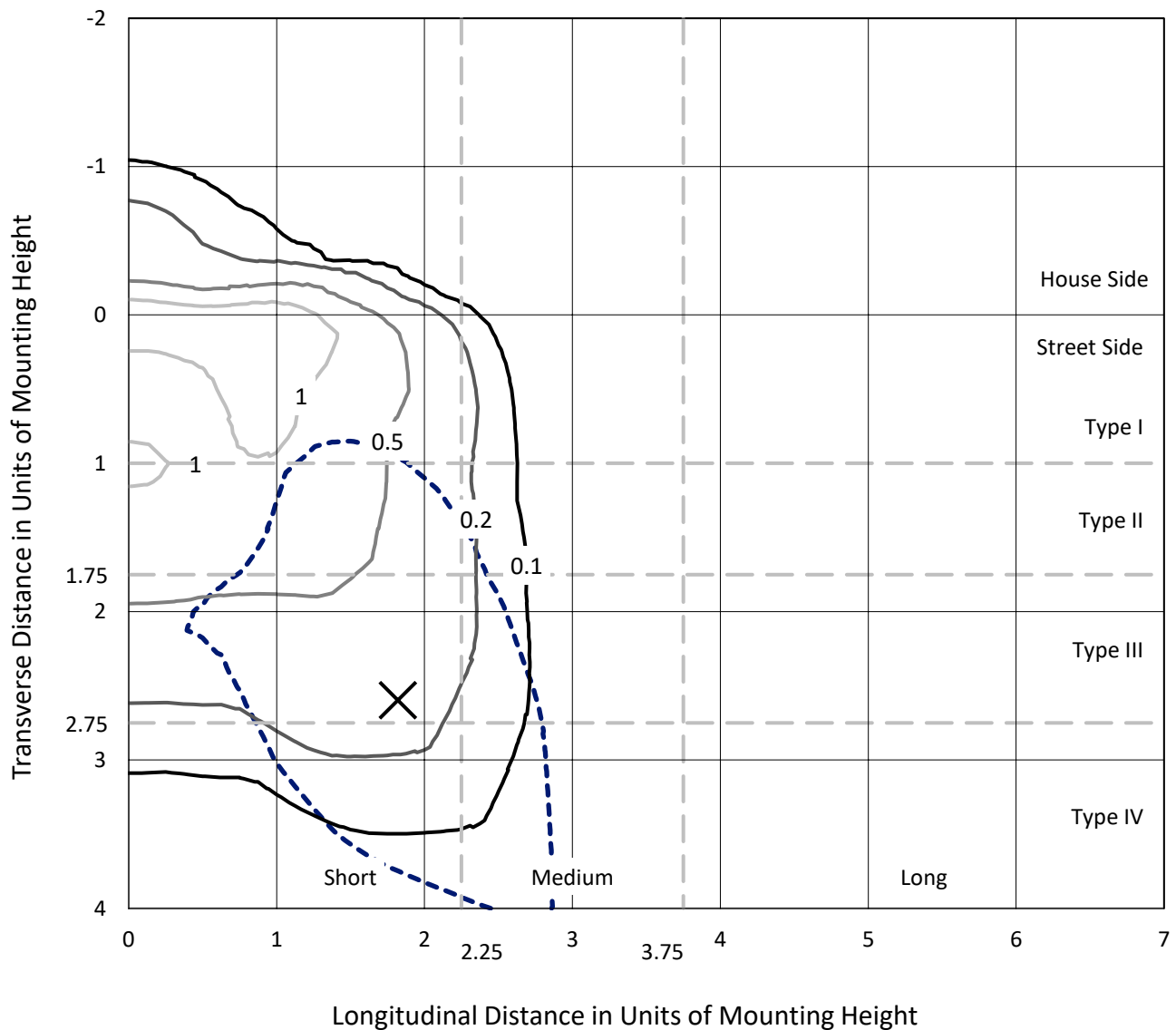
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

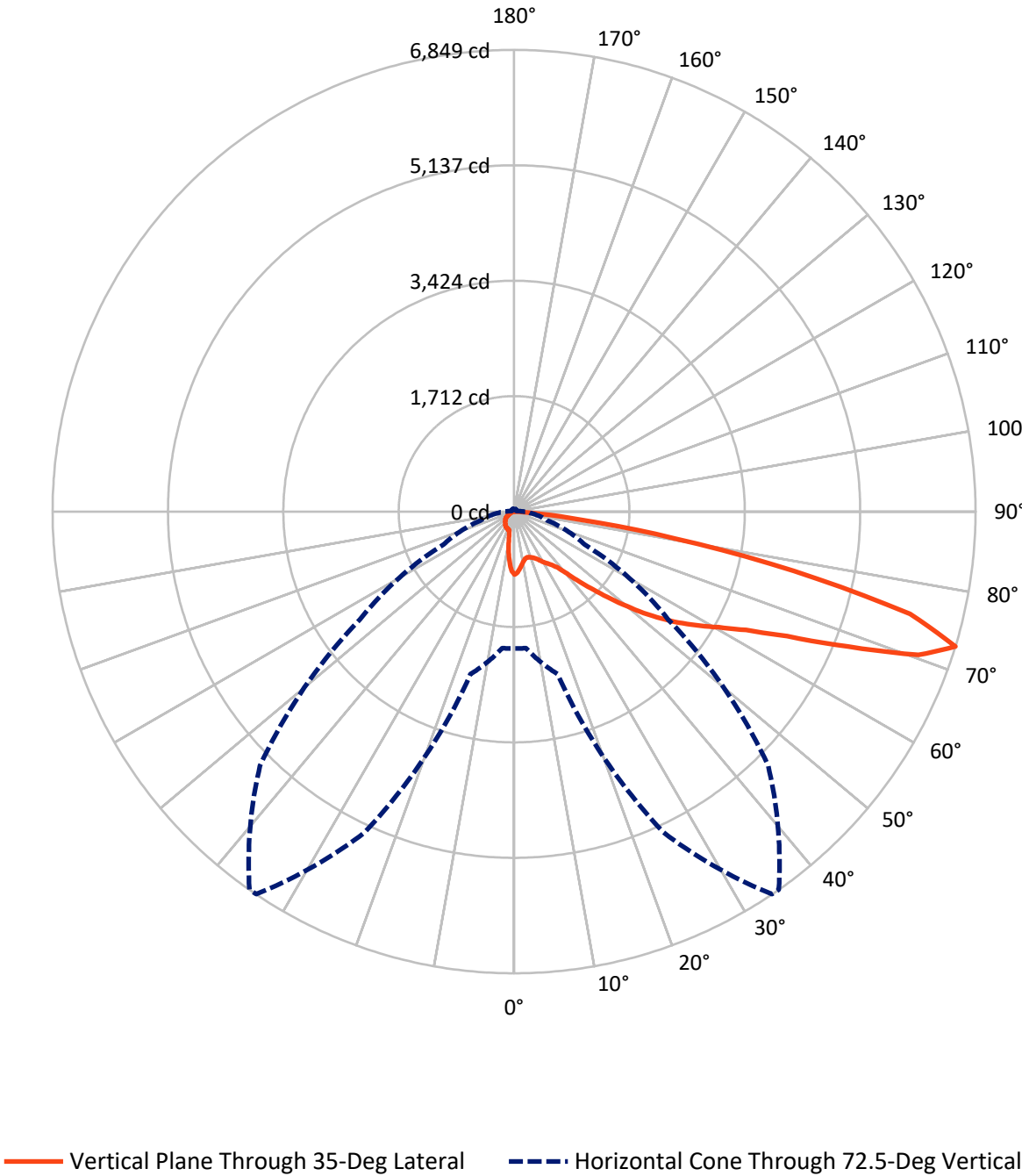
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 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	726.8	0.0	726.8
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	5730.7	0.0	5730.7
	% Fixture	88.7	0.0	88.7
Total	Lumens	6457.5	0.0	6457.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.9	1.2
10°-20°	179.9	2.8
20°-30°	292.3	4.5
30°-40°	487.6	7.6
40°-50°	922.6	14.3
50°-60°	1466.1	22.7
60°-70°	1813.6	28.1
70°-80°	1127.4	17.5
80°-90°	91.1	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°	6457.5	100.0
0°-180°	6457.5	100.0

Coefficient of Utilization



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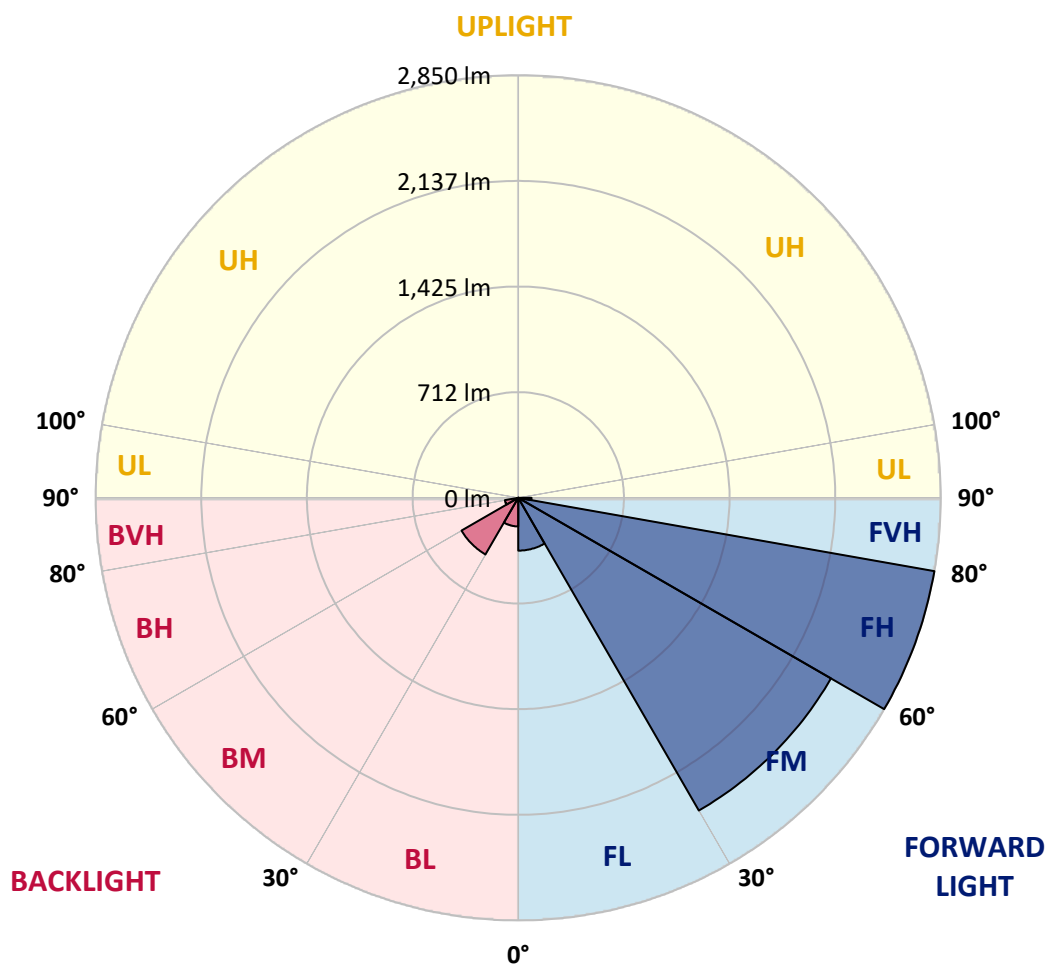
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	356.0	5.5			
FM	(30°-60°)	2435.1	37.7			
FH	(60°-80°)	2849.8	44.1			G2/5000
FVH	(80°-90°)	89.9	1.4			G1/100
BL	(0°-30°)	193.1	3.0	B1/500		
BM	(30°-60°)	441.2	6.8	B1/1000		
BH	(60°-80°)	91.2	1.4	B0/110		G0/110
BVH	(80°-90°)	1.2	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°	935.9	935.9	935.9	935.9	935.9	935.9	935.9	935.9	935.9	935.9	935.9
2.5°	894.3	901.8	903.2	905.6	905.6	908.5	913.2	919.8	930.7	936.3	940.1
5°	824.2	829.9	837.0	842.7	853.6	855.0	873.4	891.4	916.6	935.4	948.6
7.5°	753.8	760.3	769.9	783.5	797.8	802.0	829.9	860.2	900.0	935.4	957.7
10°	704.1	704.5	713.1	726.7	749.5	754.7	788.7	831.8	881.5	929.8	966.2
12.5°	676.2	679.5	683.3	693.6	715.4	718.7	755.1	805.8	863.0	926.4	976.1
15°	676.2	678.6	680.9	686.0	703.6	706.4	738.6	789.2	853.6	927.8	992.2
17.5°	683.3	687.1	685.1	691.3	709.7	711.7	740.0	784.5	853.1	936.8	1016.8
20°	700.3	703.2	699.4	703.2	721.6	725.4	754.7	793.5	861.1	952.4	1047.6
22.5°	727.2	728.7	719.7	722.5	741.5	746.2	780.2	819.1	880.6	977.5	1088.8
25°	761.3	764.1	750.4	753.8	771.7	777.4	816.7	857.4	911.3	1012.1	1141.2
27.5°	800.6	802.0	790.2	789.7	812.9	820.9	860.7	904.7	952.4	1055.6	1207.6
30°	845.5	849.8	838.4	836.5	865.9	872.5	911.7	962.9	1013.0	1120.9	1301.6
32.5°	881.0	884.4	877.7	882.4	912.2	917.5	973.7	1045.2	1108.1	1213.7	1429.9
35°	932.1	934.0	918.9	927.4	961.4	974.7	1058.4	1160.6	1227.8	1330.0	1597.4
37.5°	1117.1	1117.1	1052.8	1010.6	1043.3	1055.1	1174.3	1306.0	1375.4	1486.1	1808.4
40°	1373.1	1368.9	1274.7	1188.6	1184.3	1207.6	1339.5	1489.0	1566.2	1673.5	2045.9
42.5°	1646.2	1639.5	1511.3	1426.1	1411.9	1419.9	1530.2	1714.7	1793.2	1902.1	2301.4
45°	1888.4	1886.5	1769.2	1654.7	1629.1	1654.7	1768.2	1978.8	2035.0	2149.5	2556.5
47.5°	2091.4	2091.4	2005.7	1931.0	1917.7	1932.8	2090.4	2271.6	2266.5	2413.2	2804.9
50°	2325.1	2323.2	2241.8	2209.7	2223.3	2244.6	2461.3	2580.1	2505.8	2672.0	3026.8
52.5°	2488.8	2500.2	2472.3	2467.1	2537.1	2574.0	2838.0	2882.0	2720.1	2917.5	3192.9
55°	2618.5	2631.7	2663.9	2700.4	2835.1	2883.4	3202.8	3168.3	2899.5	3130.5	3288.4
57.5°	2802.0	2783.1	2832.8	2904.7	3122.9	3181.1	3556.2	3438.5	3043.8	3303.2	3298.9
60°	3024.9	3027.7	3036.3	3127.1	3410.1	3484.8	3904.5	3694.0	3136.6	3409.2	3183.4
62.5°	3292.7	3297.0	3314.4	3454.0	3795.7	3866.2	4275.5	3903.1	3179.1	3379.3	2885.3
65°	3274.3	3292.2	3487.7	3965.1	4381.9	4451.5	4708.4	4049.8	3114.8	3106.8	2349.2
67.5°	2982.7	3012.2	3339.0	4575.5	5265.8	5343.4	5231.7	4078.7	2837.1	2415.9	1532.6
70°	2600.5	2610.9	3004.1	5124.3	6289.2	6367.8	5700.1	3761.1	2152.9	1347.6	686.5
72.5°	2030.8	2033.2	2494.5	5251.6	6844.7	6848.9	5332.5	2792.1	1157.8	517.6	238.5
75°	1450.7	1436.5	1670.7	4258.9	6021.9	6070.2	3997.7	1309.7	442.4	244.7	118.8
77.5°	777.9	793.5	945.4	2525.7	4160.0	4242.4	2181.3	377.6	225.2	166.6	78.5
80°	240.4	253.6	387.6	1156.4	2356.4	2406.0	808.6	168.0	157.1	118.8	51.6
82.5°	75.7	78.5	180.7	486.0	978.1	1000.7	234.2	95.1	107.4	78.5	30.2
85°	21.7	22.2	80.5	181.2	241.8	246.5	65.8	36.9	61.5	48.7	15.6
87.5°	2.4	7.6	30.2	30.2	21.3	20.8	7.1	8.0	17.5	6.1	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°	935.9	935.9	935.9	935.9	935.9	935.9	935.9	935.9	935.9	935.9	935.9
2.5°	937.8	938.3	932.1	921.7	910.4	900.9	889.1	879.6	873.0	871.0	874.4
5°	944.4	941.2	923.6	892.0	854.0	821.4	784.9	756.1	737.2	729.2	732.0
7.5°	954.4	944.9	906.6	844.1	771.7	707.4	642.1	591.4	559.2	543.1	545.5
10°	962.9	943.9	878.2	775.0	664.3	566.8	478.9	417.8	383.8	367.7	368.1
12.5°	970.9	943.5	841.3	693.2	543.1	423.9	342.1	311.8	302.4	299.0	298.1
15°	986.0	944.9	794.9	599.5	422.5	320.3	290.5	290.1	291.9	291.0	290.5
17.5°	1006.9	946.3	742.4	500.1	326.1	282.5	281.1	285.4	288.1	286.7	286.3
20°	1033.8	952.0	686.5	401.7	280.1	273.1	276.3	280.1	282.5	280.1	279.6
22.5°	1071.7	962.0	625.6	322.7	265.5	267.3	270.2	274.4	276.8	273.5	273.1
25°	1118.1	977.5	565.4	280.5	258.3	260.8	265.0	269.7	272.5	269.3	268.8
27.5°	1178.1	1002.7	510.0	271.1	251.2	252.7	258.8	265.9	269.7	265.5	265.5
30°	1265.3	1043.8	462.3	275.4	247.0	243.6	252.2	262.1	266.4	262.6	262.1
32.5°	1380.7	1102.0	433.0	282.0	245.1	233.3	241.3	254.1	261.2	258.8	258.8
35°	1532.1	1190.4	421.6	289.6	243.6	222.4	228.1	241.8	254.1	256.5	256.5
37.5°	1715.6	1313.5	424.9	292.8	239.4	213.4	216.3	228.1	244.2	251.7	253.6
40°	1924.3	1456.8	443.8	289.6	234.7	205.8	206.3	215.2	229.5	240.9	244.7
42.5°	2139.6	1624.3	478.9	277.3	230.4	199.2	197.8	204.0	213.4	221.4	224.8
45°	2344.5	1796.6	513.4	260.2	225.2	192.6	189.2	191.7	193.5	196.8	198.7
47.5°	2523.3	1917.7	503.5	244.7	218.1	185.0	179.4	178.4	172.7	172.2	171.8
50°	2646.9	1944.2	447.1	229.0	207.8	176.5	167.5	161.8	151.9	147.2	147.6
52.5°	2686.1	1839.7	365.3	213.4	190.6	165.1	152.3	143.4	131.1	126.8	126.4
55°	2634.0	1634.8	291.9	194.4	167.1	150.0	135.8	123.9	114.1	108.9	108.9
57.5°	2506.8	1374.0	230.9	172.2	142.0	132.9	118.8	106.9	98.4	93.2	92.2
60°	2295.8	1091.1	182.7	145.8	121.2	114.5	99.8	92.2	84.7	78.5	77.1
62.5°	1975.5	778.8	143.4	115.4	101.3	93.7	85.2	79.5	70.5	62.0	60.6
65°	1541.6	476.4	110.7	84.7	81.4	77.6	72.4	67.1	56.3	47.8	46.3
67.5°	972.3	225.7	79.0	63.9	64.4	62.4	60.1	55.9	47.8	40.2	39.3
70°	428.2	109.3	52.1	48.7	47.8	47.8	49.7	48.3	40.7	33.6	32.2
72.5°	145.8	58.6	38.8	36.9	34.5	34.0	41.6	40.2	32.7	26.0	24.6
75°	76.2	39.3	28.4	26.5	20.8	25.1	33.1	31.3	23.2	17.0	15.6
77.5°	49.7	27.9	19.4	17.0	11.8	16.6	24.6	21.7	13.7	8.5	7.6
80°	31.3	18.4	11.4	8.0	5.6	9.0	13.2	9.4	5.2	1.8	1.4
82.5°	16.6	9.4	4.3	2.9	2.4	2.9	3.3	2.4	0.9	0.0	0.0
85°	6.7	3.3	1.4	0.9	0.5	0.0	0.9	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)