

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: P961352

Luminaire Tested: **NAV-SB2A-727-U-T3**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P961352  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2A-727-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

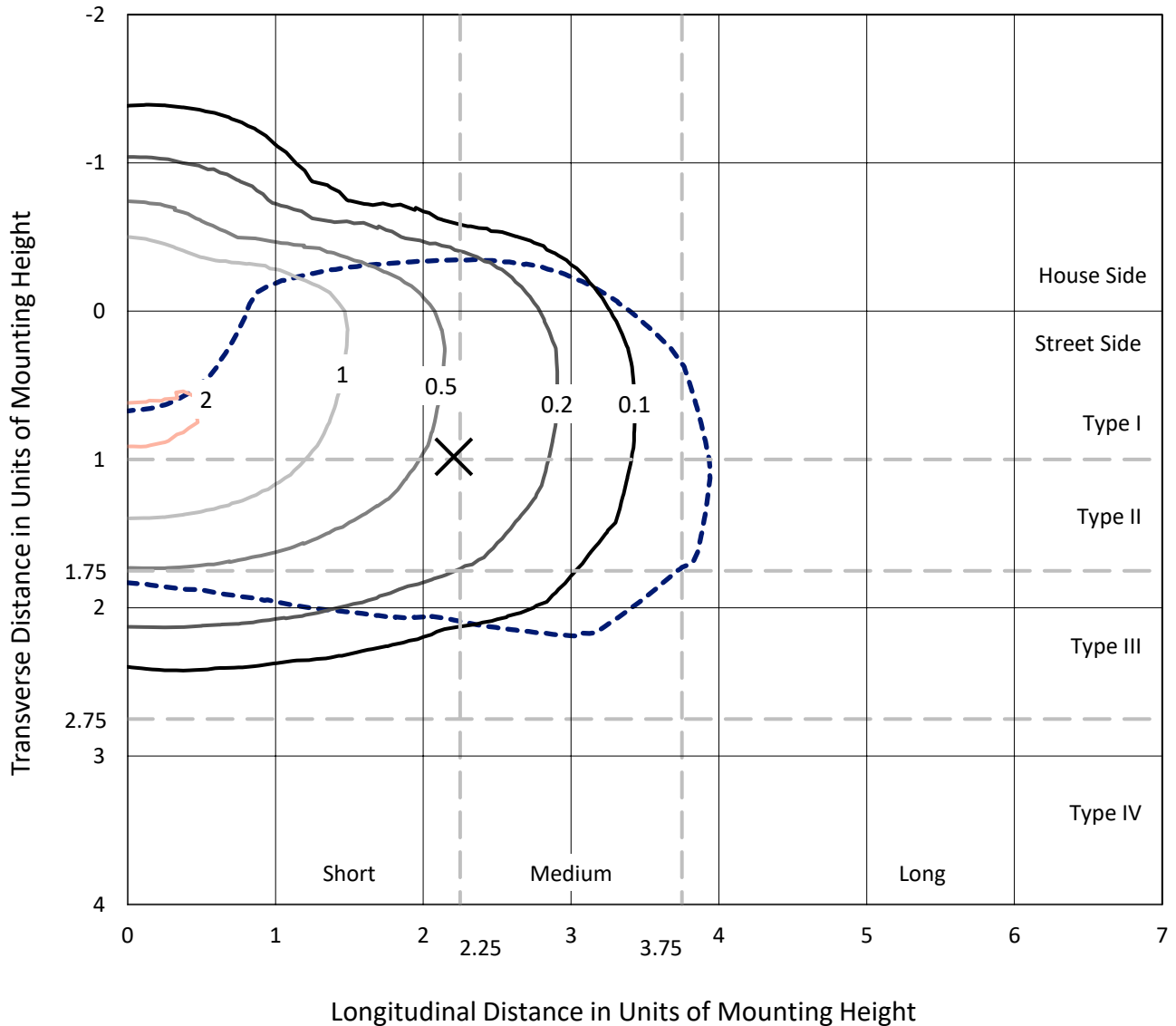
Lumens per Lamp: N/A  
Luminaire Lumens: 8534.1 lumens  
Efficiency: N/A  
Efficacy: 148.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 57.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

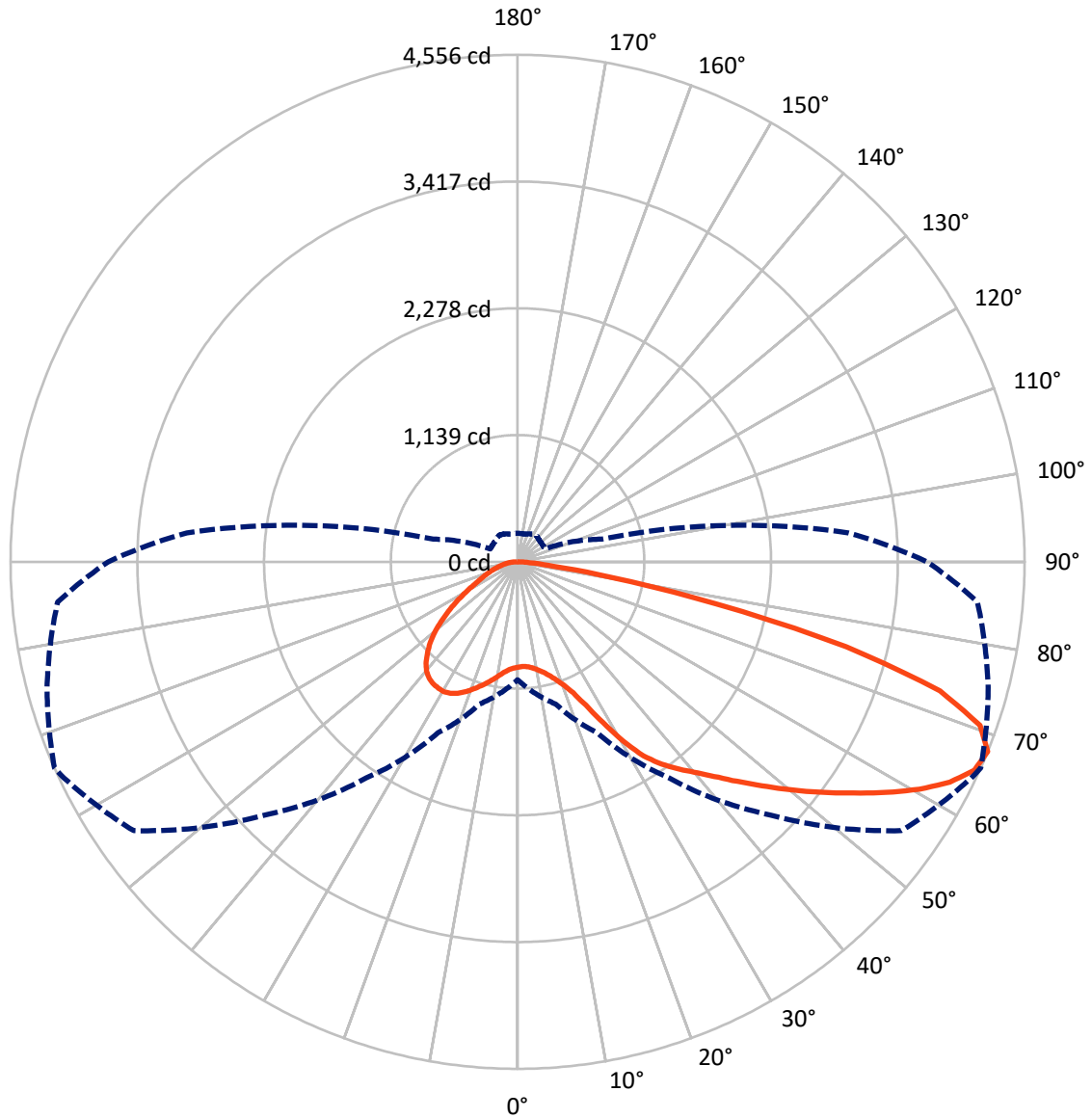
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2122.0	0.0	2122.0
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	6412.2	0.0	6412.2
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	8534.1	0.0	8534.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.8	1.1
10°-20°	310.1	3.6
20°-30°	597.6	7.0
30°-40°	1047.8	12.3
40°-50°	1557.8	18.3
50°-60°	1974.7	23.1
60°-70°	1932.2	22.6
70°-80°	921.7	10.8
80°-90°	98.5	1.2
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°	8534.1	100.0
0°-180°	8534.1	100.0

**Coefficient of Utilization**

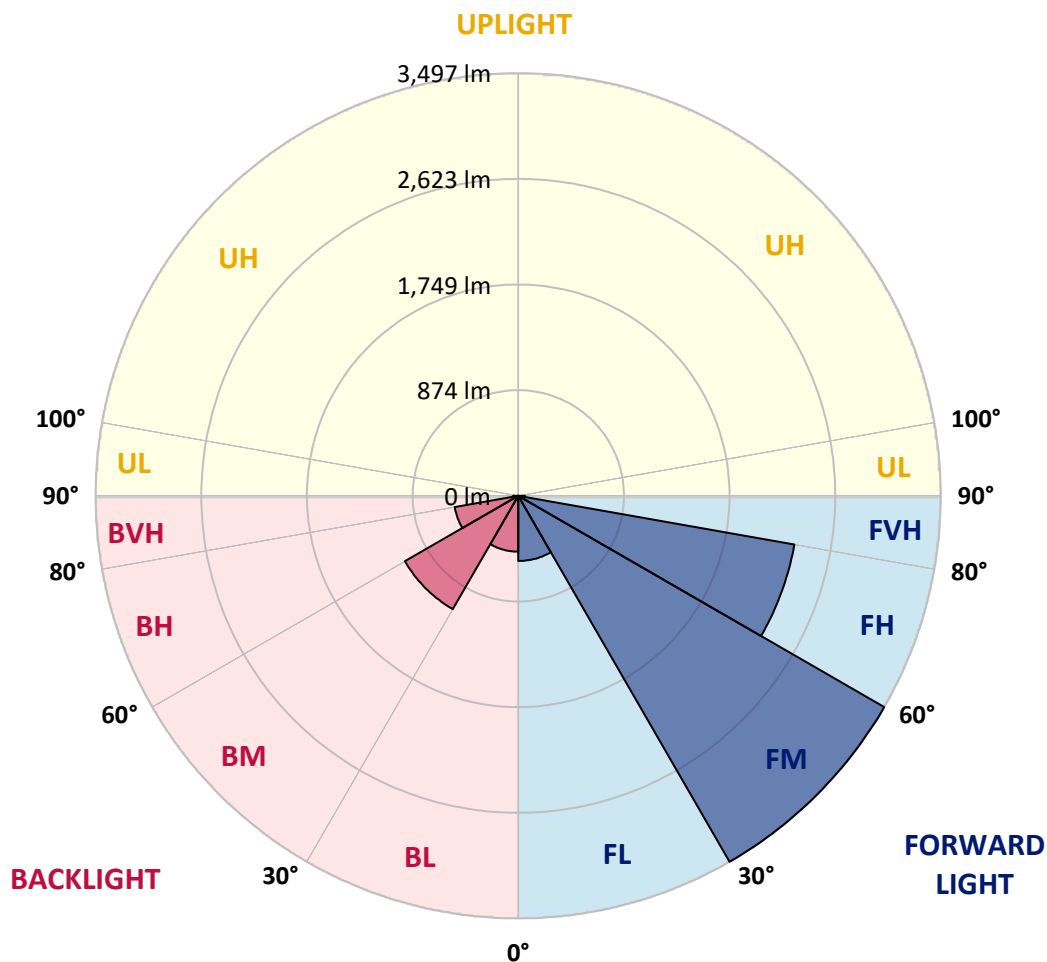


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	539.3	6.3			
FM (30°-60°)	3497.2	41.0			
FH (60°-80°)	2319.8	27.2			G2/5000
FVH (80°-90°)	55.8	0.7			G1/100
BL (0°-30°)	462.2	5.4	B1/500		
BM (30°-60°)	1083.1	12.7	B2/2500		
BH (60°-80°)	534.0	6.3	B2/1000		G2/1000
BVH (80°-90°)	42.7	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	946.6	946.6	946.6	946.6	946.6	946.6	946.6	946.6	946.6	946.6	946.6
2.5°	936.6	942.1	940.7	938.5	938.1	938.9	940.2	941.7	941.2	943.4	947.0
5°	934.0	939.4	938.9	938.9	940.7	944.3	946.6	948.8	946.6	949.3	954.2
7.5°	935.8	939.8	941.7	943.4	947.9	954.6	960.0	964.9	962.3	965.3	971.7
10°	958.7	961.8	963.6	963.6	966.7	974.4	979.7	988.7	986.5	991.4	999.5
12.5°	1000.4	1003.5	1003.5	1001.7	1004.0	1008.9	1010.6	1020.5	1016.5	1024.6	1032.7
15°	1051.4	1057.8	1052.8	1049.7	1050.6	1055.5	1055.0	1062.7	1058.6	1065.4	1072.6
17.5°	1107.9	1116.0	1107.9	1107.5	1105.8	1111.1	1111.5	1118.3	1111.1	1116.0	1120.9
20°	1174.8	1186.0	1179.3	1181.5	1177.5	1179.7	1181.9	1191.9	1180.6	1184.2	1182.8
22.5°	1268.9	1282.4	1275.2	1283.7	1281.0	1279.3	1278.8	1296.3	1278.8	1280.1	1267.1
25°	1406.2	1422.3	1409.8	1421.4	1421.4	1427.2	1434.0	1456.3	1427.2	1418.7	1385.1
27.5°	1608.8	1624.9	1600.3	1607.5	1605.3	1619.6	1612.4	1668.0	1636.6	1622.7	1555.0
30°	1852.8	1881.5	1834.9	1833.0	1830.8	1853.6	1864.0	1900.8	1868.9	1854.9	1773.4
32.5°	2116.4	2146.5	2090.8	2074.7	2066.2	2080.0	2071.5	2101.1	2079.2	2057.7	1956.7
35°	2395.3	2424.8	2372.0	2340.6	2306.6	2277.3	2246.9	2254.5	2233.9	2201.2	2096.6
37.5°	2659.0	2713.2	2657.1	2623.5	2560.8	2503.8	2418.6	2383.2	2364.0	2333.8	2228.5
40°	2927.5	2958.5	2915.9	2887.2	2819.1	2729.8	2593.5	2518.6	2492.6	2463.5	2374.2
42.5°	3125.2	3154.8	3132.0	3112.3	3058.9	2955.4	2779.1	2685.4	2647.8	2615.0	2539.2
45°	3282.3	3304.2	3289.8	3297.0	3274.2	3173.7	2971.5	2864.4	2825.3	2785.4	2725.8
47.5°	3345.4	3368.8	3391.6	3434.3	3473.2	3399.2	3178.2	3058.0	3016.8	2976.0	2917.3
50°	3338.2	3362.0	3428.4	3518.9	3640.0	3615.4	3396.1	3264.3	3226.2	3179.5	3125.2
52.5°	3280.8	3307.8	3393.0	3543.6	3736.4	3777.2	3618.0	3477.2	3441.4	3385.8	3331.6
55°	3130.2	3146.3	3274.2	3487.6	3759.3	3890.2	3835.6	3704.1	3668.3	3590.7	3531.5
57.5°	2850.8	2874.2	3060.2	3336.5	3701.9	3966.9	4026.5	3942.7	3908.1	3796.5	3734.6
60°	2486.3	2523.5	2736.5	3082.7	3555.7	3966.4	4200.0	4177.2	4148.5	3999.1	3934.7
62.5°	2073.8	2116.8	2321.7	2723.9	3300.2	3853.9	4308.6	4373.6	4358.8	4186.2	4103.7
65°	1592.6	1622.3	1826.2	2259.9	2902.4	3612.2	4321.1	4507.6	4510.3	4328.3	4191.9
67.5°	1060.5	1145.6	1322.8	1695.8	2369.7	3217.2	4210.8	4529.7	4555.6	4377.2	4147.6
70°	517.4	629.6	803.1	1102.2	1695.8	2611.4	3922.5	4349.4	4407.2	4234.6	3883.0
72.5°	214.7	251.1	345.7	543.9	973.4	1762.2	3343.2	3860.7	3967.8	3752.1	3264.7
75°	144.8	156.9	197.7	278.9	443.4	869.0	2411.0	2878.6	3051.3	2833.8	2316.4
77.5°	111.6	119.3	143.9	195.1	263.6	328.7	1290.5	1734.8	1824.1	1688.6	1205.3
80°	87.8	93.7	107.6	142.2	187.0	175.8	439.8	786.1	837.6	702.6	387.4
82.5°	76.3	78.5	77.1	96.5	124.2	102.7	144.4	290.1	320.1	232.3	126.5
85°	55.1	61.4	64.2	59.7	65.9	52.0	59.1	102.7	113.0	100.9	71.3
87.5°	22.4	33.2	40.8	38.5	24.2	14.8	18.3	30.0	34.5	37.6	23.3
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°	946.6	946.6	946.6	946.6	946.6	946.6	946.6	946.6	946.6	946.6	946.6
2.5°	947.4	950.6	952.8	955.5	957.4	960.0	965.3	968.5	968.9	971.2	970.8
5°	955.9	960.4	965.3	972.5	980.6	987.4	997.6	1004.8	1007.6	1009.7	1009.3
7.5°	974.4	980.6	989.6	1002.1	1013.8	1022.7	1035.4	1043.9	1052.4	1055.5	1056.0
10°	1001.7	1010.6	1023.7	1040.7	1053.3	1065.0	1077.9	1085.1	1093.6	1097.2	1099.0
12.5°	1035.8	1045.2	1062.2	1086.0	1097.7	1105.8	1110.2	1108.4	1110.2	1113.4	1114.3
15°	1074.8	1085.1	1104.3	1130.0	1138.1	1130.9	1120.9	1112.0	1110.7	1111.5	1114.7
17.5°	1120.9	1128.6	1151.0	1172.5	1166.8	1137.1	1115.6	1101.3	1094.1	1091.8	1095.0
20°	1185.5	1185.5	1204.0	1217.4	1178.3	1128.1	1094.5	1071.2	1056.4	1050.1	1048.8
22.5°	1264.0	1256.9	1268.5	1259.1	1176.1	1103.0	1056.4	1016.1	993.6	984.6	983.3
25°	1363.6	1355.0	1351.9	1293.7	1160.0	1063.1	987.4	938.5	918.7	913.8	914.7
27.5°	1513.7	1492.2	1451.4	1312.4	1130.4	1000.4	906.6	861.3	850.1	850.5	852.0
30°	1713.7	1670.7	1570.7	1315.6	1082.0	911.5	824.1	791.8	786.5	788.7	796.3
32.5°	1898.9	1858.1	1692.7	1301.2	1007.6	824.6	750.2	728.7	720.6	723.2	726.8
35°	2044.2	2033.0	1805.6	1281.0	916.0	743.0	683.8	665.4	649.7	646.2	648.8
37.5°	2181.4	2176.9	1890.4	1252.8	825.5	685.1	630.5	606.2	583.3	570.8	571.2
40°	2332.1	2327.6	1946.0	1209.3	745.2	634.9	582.5	550.6	522.3	499.5	501.7
42.5°	2501.6	2475.1	1972.5	1147.0	677.1	592.3	543.5	500.4	463.2	442.1	443.4
45°	2686.7	2627.1	1972.0	1067.6	619.7	553.3	501.7	440.7	406.2	386.5	385.6
47.5°	2883.1	2772.4	1947.8	979.7	564.1	510.2	437.2	390.5	367.7	355.6	352.9
50°	3085.9	2908.2	1906.6	878.8	507.2	461.4	396.8	365.0	347.5	336.3	332.3
52.5°	3276.4	3031.5	1856.8	764.5	449.3	413.9	378.8	354.2	335.9	323.3	318.0
55°	3453.5	3137.8	1786.4	647.5	402.2	382.0	370.3	349.7	328.7	313.9	308.0
57.5°	3610.9	3206.9	1664.9	537.6	368.6	360.1	361.4	342.1	318.0	305.3	297.2
60°	3741.8	3257.6	1485.0	435.8	341.2	338.6	347.5	327.8	299.5	285.2	278.9
62.5°	3820.3	3256.6	1264.4	356.9	318.0	318.8	329.1	309.9	281.2	267.7	263.6
65°	3813.5	3176.9	1022.3	305.3	295.5	296.4	309.9	290.1	265.9	257.8	257.4
67.5°	3678.6	2982.2	784.2	271.7	270.8	274.9	290.6	276.6	256.5	255.5	257.0
70°	3313.1	2578.3	565.0	244.8	245.3	251.1	271.7	268.1	251.5	253.4	252.9
72.5°	2656.7	1965.7	379.4	216.6	217.0	226.4	253.8	261.4	246.6	270.4	274.0
75°	1769.4	1225.9	244.0	186.5	187.0	199.1	238.1	248.4	233.2	269.5	271.7
77.5°	850.1	551.0	176.7	156.9	156.9	168.1	205.8	222.4	198.6	209.4	191.9
80°	293.7	207.2	139.0	126.5	123.7	131.4	173.5	192.8	171.3	157.8	148.0
82.5°	115.7	107.6	111.6	98.2	89.3	94.2	135.0	159.2	126.0	113.9	113.5
85°	66.3	69.9	78.9	65.0	51.6	57.8	99.1	114.4	95.0	83.8	85.7
87.5°	17.9	24.7	36.3	33.6	23.3	24.7	47.0	63.2	54.7	42.1	43.5
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)