

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: P961356

Luminaire Tested: **NAV-SB2A-727-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961356
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-727-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8511.6 lumens
Efficiency: N/A
Efficacy: 148.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

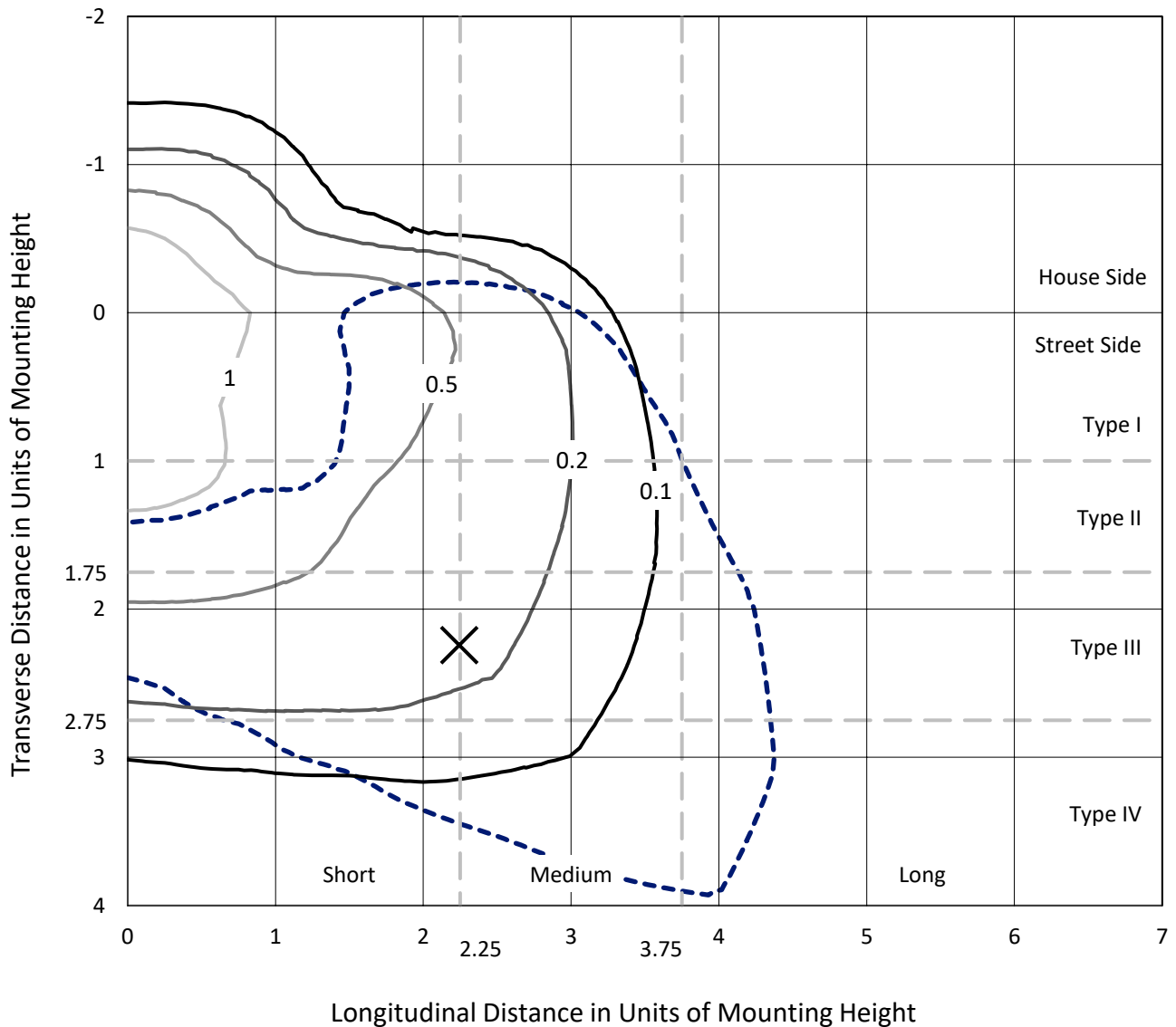
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

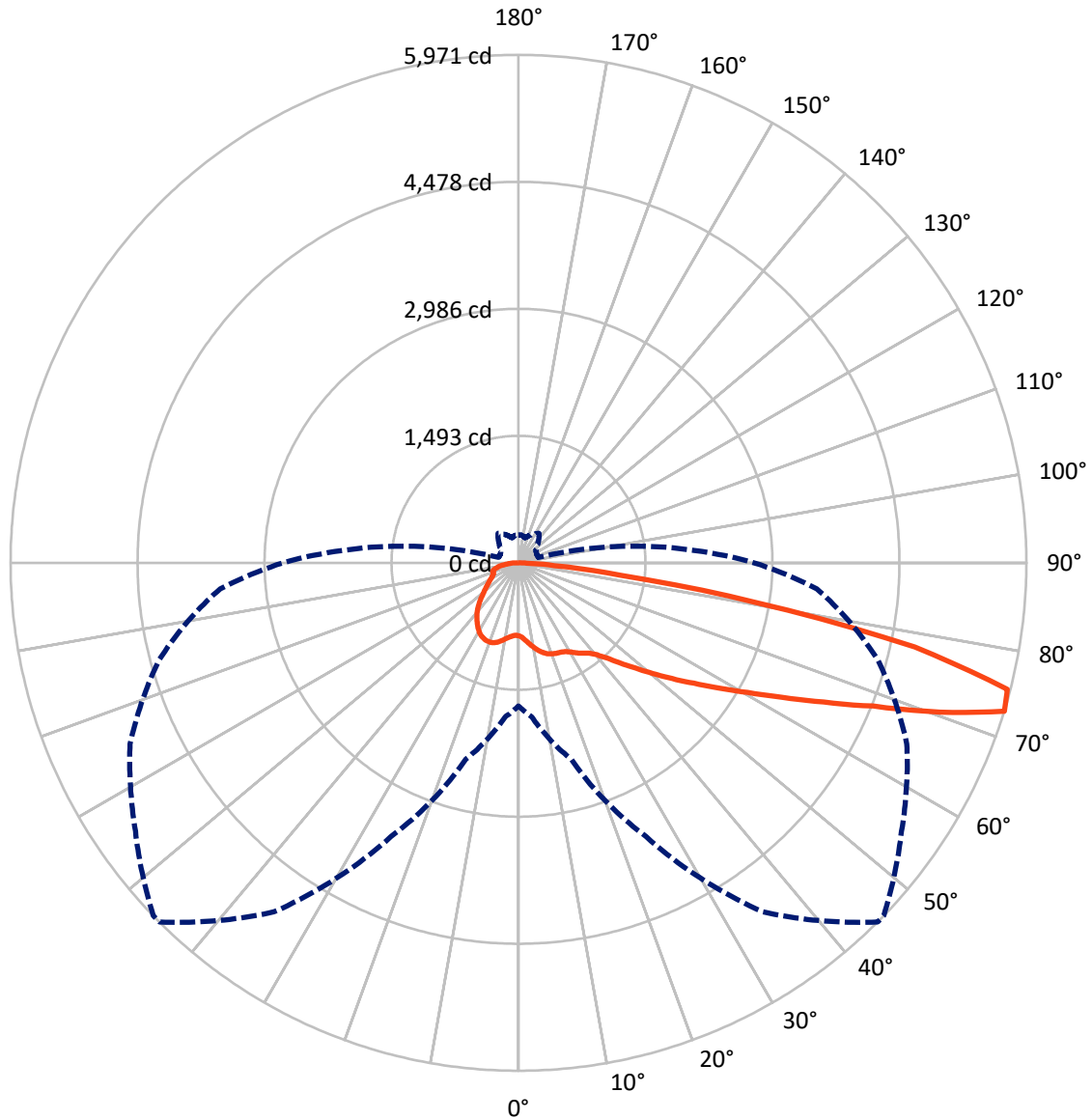
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1924.2	0.0	1924.2
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	6587.4	0.0	6587.4
	% Fixture	77.4	0.0	77.4
Total	Lumens	8511.6	0.0	8511.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.4	1.0
10°-20°	291.4	3.4
20°-30°	506.9	6.0
30°-40°	726.6	8.5
40°-50°	1023.2	12.0
50°-60°	1567.2	18.4
60°-70°	2270.3	26.7
70°-80°	1812.9	21.3
80°-90°	225.8	2.7
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°	8511.6	100.0
0°-180°	8511.6	100.0

Coefficient of Utilization

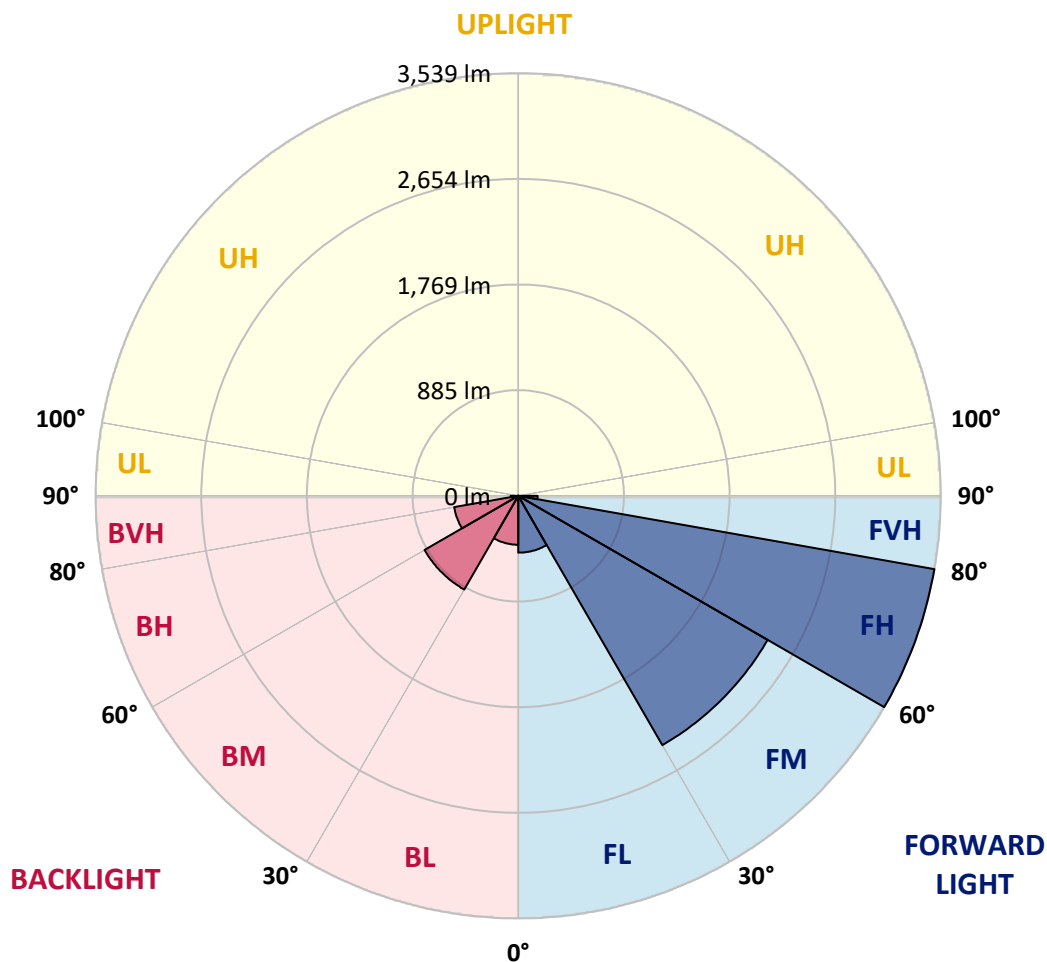


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	476.0	5.6			
FM (30°-60°)	2410.9	28.3			
FH (60°-80°)	3538.5	41.6			G2/5000
FVH (80°-90°)	162.0	1.9			G2/225
BL (0°-30°)	409.7	4.8	B1/500		
BM (30°-60°)	906.0	10.6	B1/1000		
BH (60°-80°)	544.7	6.4	B2/1000		G2/1000
BVH (80°-90°)	63.8	0.7			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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6
2.5°	892.3	898.1	892.8	887.8	885.6	879.8	879.2	875.7	873.4	867.2	865.4
5°	954.6	962.3	953.2	943.4	934.4	920.0	918.3	907.9	896.4	882.8	875.2
7.5°	1025.0	1031.8	1021.4	1006.7	991.0	967.2	966.7	947.9	929.5	906.6	893.6
10°	1086.4	1095.4	1081.5	1061.3	1041.6	1014.6	1011.6	990.0	966.7	937.2	917.4
12.5°	1140.7	1147.0	1133.5	1108.8	1086.0	1059.1	1055.0	1031.3	1005.3	971.6	946.6
15°	1183.8	1191.8	1173.8	1147.4	1123.2	1096.8	1093.2	1071.6	1045.6	1010.2	978.0
17.5°	1212.0	1218.7	1200.3	1170.8	1147.4	1125.4	1122.8	1104.8	1082.0	1046.1	1011.6
20°	1222.7	1229.9	1210.6	1180.6	1159.1	1142.1	1140.7	1127.7	1112.0	1079.2	1044.3
22.5°	1233.5	1240.2	1215.1	1183.8	1164.9	1154.1	1153.7	1145.1	1138.9	1112.0	1077.9
25°	1277.0	1278.8	1245.2	1199.9	1173.0	1163.6	1163.1	1162.7	1165.3	1144.3	1114.3
27.5°	1314.7	1314.3	1285.6	1242.9	1201.2	1181.5	1181.0	1185.5	1194.0	1176.6	1151.9
30°	1369.8	1364.9	1330.8	1286.4	1248.3	1217.8	1215.1	1211.0	1217.8	1203.9	1189.5
32.5°	1486.9	1471.2	1416.0	1337.1	1287.3	1264.0	1260.4	1235.3	1238.0	1229.5	1222.3
35°	1654.6	1634.0	1560.4	1433.1	1335.8	1302.6	1300.7	1268.9	1263.5	1255.9	1258.6
37.5°	1854.0	1828.5	1742.9	1572.0	1419.1	1347.4	1344.7	1316.0	1294.1	1286.0	1301.2
40°	2054.5	2022.2	1951.4	1741.5	1542.0	1422.3	1413.8	1370.2	1345.1	1331.7	1364.0
42.5°	2249.1	2222.2	2161.6	1931.6	1693.5	1531.7	1512.8	1438.4	1419.6	1407.0	1465.3
45°	2421.3	2397.1	2352.7	2134.8	1871.1	1680.6	1662.1	1540.7	1534.8	1534.8	1619.1
47.5°	2561.2	2555.8	2508.7	2341.9	2080.5	1850.0	1818.1	1682.7	1698.5	1722.7	1837.5
50°	2716.4	2701.5	2651.3	2545.9	2326.6	2044.2	2018.2	1857.2	1915.9	1982.4	2153.1
52.5°	2858.9	2866.9	2811.0	2758.5	2604.6	2260.7	2215.0	2063.0	2189.9	2299.8	2523.0
55°	3005.5	3005.9	2990.2	2983.1	2896.1	2500.2	2450.0	2310.6	2512.3	2648.6	2954.4
57.5°	3143.2	3144.1	3167.4	3230.6	3234.2	2776.4	2719.4	2614.6	2870.5	3009.5	3399.2
60°	3266.1	3272.3	3336.0	3484.0	3531.4	3092.9	3039.1	2973.7	3240.9	3380.9	3866.8
62.5°	3307.3	3330.1	3471.9	3682.1	3825.2	3481.2	3428.3	3389.4	3630.1	3760.1	4257.8
65°	3237.4	3289.8	3563.7	3845.8	4127.4	3942.7	3890.2	3847.5	4034.6	4157.0	4578.9
67.5°	3065.6	3133.3	3558.4	4017.5	4494.1	4497.7	4448.9	4348.9	4468.2	4515.2	4683.3
70°	2613.1	2714.5	3244.9	4081.7	4915.2	5256.8	5209.8	4952.4	4900.8	4673.1	4389.3
72.5°	1683.7	1820.0	2389.5	3553.9	5008.9	5971.1	5968.5	5497.2	5037.6	4366.4	3520.3
75°	614.3	697.7	1110.2	2230.7	4204.4	5934.9	5952.3	5403.9	4598.7	3372.8	2193.1
77.5°	223.8	244.8	362.3	857.3	2585.9	4761.8	4798.1	4320.2	3273.2	1692.7	869.0
80°	117.5	129.1	185.6	332.7	1107.9	2828.0	2884.9	2567.4	1538.4	509.8	260.6
82.5°	65.0	70.4	104.0	180.7	499.1	1209.3	1243.3	1014.2	541.2	216.1	107.6
85°	35.0	37.2	48.9	98.6	244.0	419.2	428.7	303.1	215.7	126.9	52.0
87.5°	10.4	12.5	16.1	31.4	95.5	94.2	96.5	60.1	85.2	64.2	17.0
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°	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6
2.5°	862.6	861.3	856.4	854.1	851.5	851.1	853.3	853.7	854.1	854.6	856.4
5°	870.7	866.2	861.8	859.1	860.0	860.5	864.9	868.1	870.3	872.1	873.0
7.5°	886.4	882.8	875.2	874.8	876.2	880.2	886.0	893.2	897.2	900.4	901.3
10°	909.8	903.0	894.1	895.4	898.1	903.9	916.0	921.9	928.6	934.4	933.1
12.5°	933.6	927.7	917.4	918.3	922.8	933.1	944.7	951.9	956.4	960.9	962.7
15°	964.4	954.2	943.0	943.0	951.0	962.3	967.6	973.4	976.1	981.0	982.9
17.5°	996.3	982.9	968.0	967.2	977.0	982.4	985.5	986.5	987.4	992.7	994.6
20°	1028.2	1013.3	992.3	990.5	992.7	991.8	991.4	990.5	991.8	998.6	1001.2
22.5°	1059.5	1042.5	1013.3	1005.3	999.0	990.5	990.0	989.5	990.5	997.2	1001.7
25°	1096.3	1075.6	1036.7	1012.5	991.4	979.7	981.0	981.5	982.4	987.8	995.0
27.5°	1136.2	1113.4	1058.2	1010.2	972.1	964.0	961.8	963.1	966.3	974.8	983.3
30°	1176.1	1149.2	1077.9	1001.2	947.9	936.6	929.5	932.6	942.5	951.0	960.4
32.5°	1212.5	1185.5	1093.6	981.5	917.0	899.4	890.0	894.1	903.9	907.1	918.3
35°	1255.0	1224.6	1100.3	950.2	883.3	856.4	843.9	838.0	843.0	839.8	849.7
37.5°	1302.6	1270.7	1099.4	908.9	843.9	812.9	795.4	773.5	763.1	752.3	759.1
40°	1373.0	1327.2	1088.7	859.1	795.0	766.7	735.3	698.1	674.9	653.7	655.1
42.5°	1468.9	1405.7	1069.0	804.4	739.8	713.4	670.8	627.3	590.5	555.6	552.4
45°	1611.9	1508.4	1044.3	746.1	680.2	654.2	608.0	559.1	517.4	472.6	467.2
47.5°	1818.1	1646.5	1021.0	679.8	617.5	593.7	552.0	506.7	457.4	413.9	409.0
50°	2101.6	1844.7	999.5	615.2	555.6	537.6	504.4	458.3	408.5	373.5	371.3
52.5°	2462.0	2114.2	990.5	552.9	497.7	491.0	464.5	421.5	374.4	344.8	342.6
55°	2875.9	2436.5	990.5	493.2	447.0	449.3	430.9	391.0	350.1	323.7	321.0
57.5°	3298.3	2763.0	972.5	438.1	404.0	413.4	401.8	366.7	330.0	302.7	298.2
60°	3687.5	3036.5	900.0	387.9	365.9	380.7	373.1	343.0	298.2	275.3	271.7
62.5°	3986.5	3190.7	760.0	348.0	334.5	351.6	347.5	311.6	292.3	282.9	279.8
65°	4136.4	3165.6	581.1	312.5	308.0	334.5	326.0	324.6	309.3	298.6	295.0
67.5°	4044.4	2949.4	421.5	286.5	292.8	318.8	351.6	356.9	328.6	307.6	304.0
70°	3641.3	2558.5	313.9	261.9	273.5	319.3	400.9	373.5	322.4	297.8	293.7
72.5°	2770.2	1907.8	243.4	235.9	248.4	321.4	422.8	365.9	304.4	329.1	326.5
75°	1584.1	1047.4	195.5	204.0	217.0	300.4	411.6	346.1	290.6	302.2	302.2
77.5°	603.9	402.6	161.4	172.6	174.5	262.3	393.7	344.8	276.6	269.9	246.2
80°	209.4	157.3	133.7	137.2	135.0	233.2	377.5	300.0	226.4	202.6	196.0
82.5°	85.7	78.5	105.8	101.4	95.9	181.1	304.9	245.3	185.2	163.7	161.8
85°	37.2	49.8	69.9	61.4	55.6	125.6	244.4	207.6	156.5	135.0	134.5
87.5°	7.6	18.9	29.6	27.8	28.7	83.8	173.5	147.5	110.7	82.9	65.0
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)