

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: P961873

Luminaire Tested: **NAV-SB2B-727-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961873
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-727-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8182.6 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

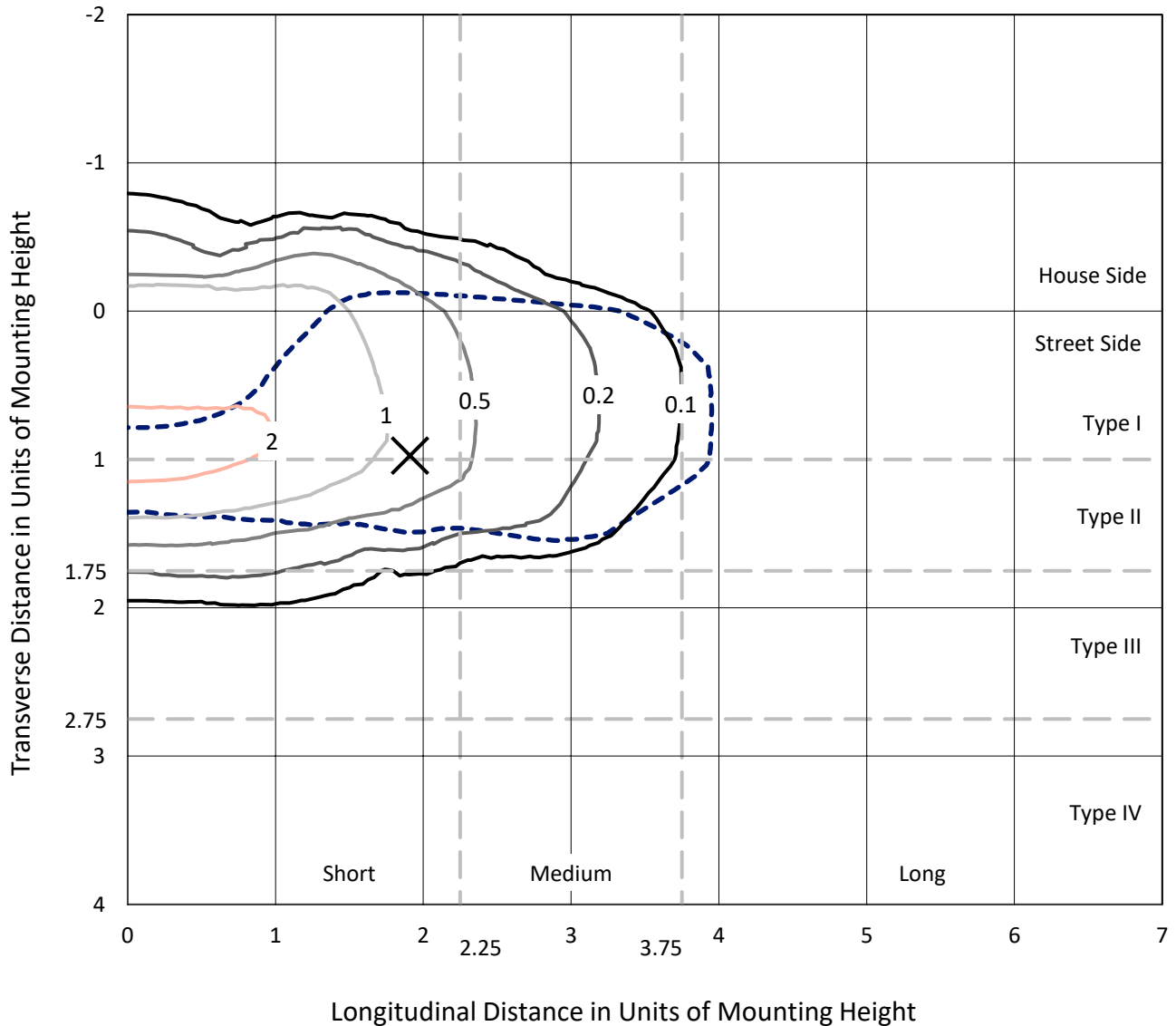
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

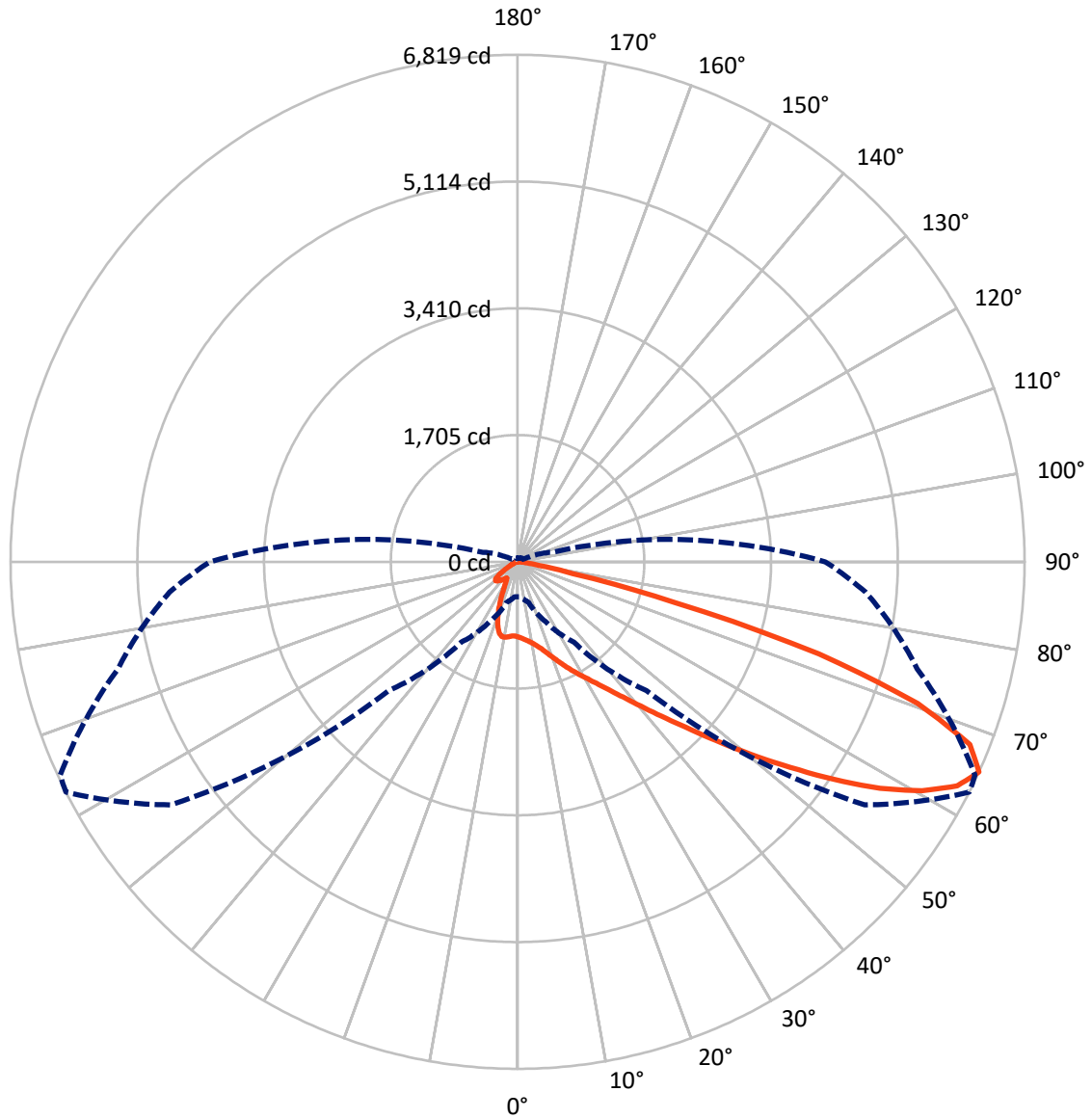
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1202.8	0.0	1202.8
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	6979.8	0.0	6979.8
	% Fixture	85.3	0.0	85.3
Total	Lumens	8182.6	0.0	8182.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.1	1.2
10°-20°	264.0	3.2
20°-30°	459.7	5.6
30°-40°	828.6	10.1
40°-50°	1643.3	20.1
50°-60°	2238.5	27.4
60°-70°	1786.7	21.8
70°-80°	808.5	9.9
80°-90°	58.1	0.7
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°	8182.6	100.0
0°-180°	8182.6	100.0

Coefficient of Utilization

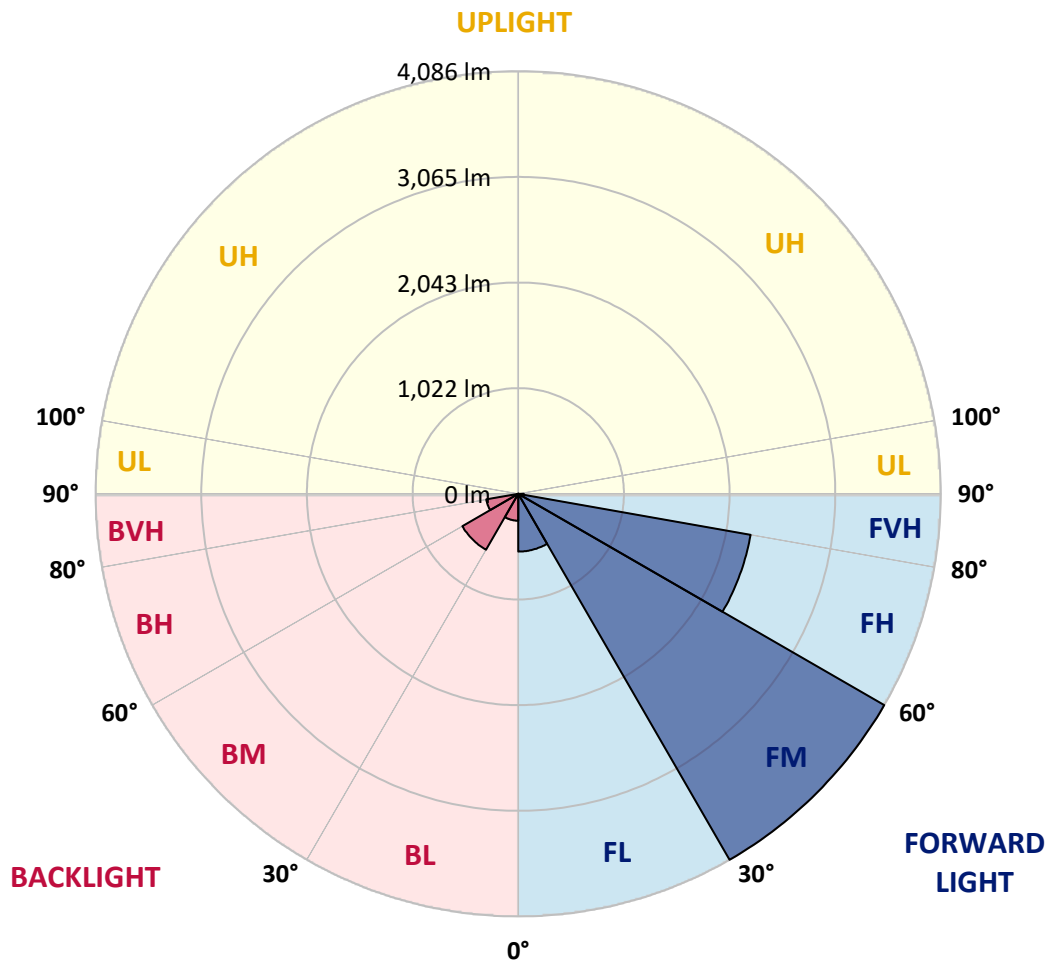


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	558.6	6.8			
FM (30°-60°)	4086.2	49.9			
FH (60°-80°)	2281.3	27.9			G2/5000
FVH (80°-90°)	53.8	0.7			G1/100
BL (0°-30°)	260.3	3.2	B1/500		
BM (30°-60°)	624.2	7.6	B1/1000		
BH (60°-80°)	314.0	3.8	B1/500		G1/500
BVH (80°-90°)	4.3	0.1			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1009.9	1009.9	1009.9	1009.9	1009.9	1009.9	1009.9	1009.9	1009.9	1009.9	1009.9
2.5°	1033.5	1030.7	1034.6	1033.0	1031.9	1029.6	1028.5	1027.4	1025.1	1023.4	1016.6
5°	1036.4	1034.6	1038.6	1042.0	1045.4	1048.7	1050.4	1052.7	1050.4	1045.9	1039.1
7.5°	1012.7	1011.6	1020.0	1030.1	1045.4	1058.3	1072.4	1080.2	1080.9	1079.1	1071.8
10°	1011.1	1008.2	1016.6	1029.0	1048.7	1071.8	1096.5	1113.5	1115.7	1123.0	1115.2
12.5°	1037.5	1034.6	1046.5	1060.0	1080.2	1104.4	1134.9	1158.5	1161.8	1172.0	1166.3
15°	1081.9	1078.0	1091.5	1108.9	1134.9	1162.5	1194.5	1216.0	1218.7	1231.1	1221.0
17.5°	1133.8	1129.8	1145.5	1164.1	1192.3	1230.0	1267.1	1290.8	1294.2	1302.1	1283.5
20°	1200.2	1195.0	1207.4	1224.4	1254.2	1299.2	1343.7	1377.5	1376.9	1376.9	1346.5
22.5°	1277.3	1269.4	1280.1	1293.6	1321.7	1376.4	1435.4	1475.4	1475.4	1459.7	1409.6
25°	1360.1	1352.2	1364.0	1376.4	1401.1	1463.1	1532.3	1581.8	1584.0	1557.1	1477.1
27.5°	1463.6	1453.4	1462.5	1477.1	1491.8	1554.8	1637.0	1694.4	1695.6	1653.8	1541.3
30°	1662.9	1634.2	1606.0	1590.3	1597.1	1659.5	1747.3	1811.0	1816.5	1759.1	1611.1
32.5°	2027.7	2022.0	1922.9	1793.4	1725.9	1772.1	1870.6	1947.2	1950.6	1876.8	1701.7
35°	2594.5	2587.7	2428.4	2181.9	1961.7	1922.9	2020.4	2111.0	2108.7	2025.4	1819.4
37.5°	3271.2	3264.9	3055.0	2725.1	2368.8	2151.0	2213.4	2308.5	2322.6	2213.4	1971.4
40°	3849.3	3826.2	3693.4	3375.3	2909.2	2529.2	2488.1	2551.1	2565.8	2436.3	2164.4
42.5°	4287.3	4267.5	4199.9	4001.3	3563.3	3088.7	2811.8	2836.0	2852.4	2697.0	2386.2
45°	4514.1	4509.6	4536.5	4518.0	4229.8	3775.5	3274.6	3173.8	3180.0	2985.7	2637.8
47.5°	4546.2	4543.9	4667.2	4841.7	4802.8	4550.1	3868.5	3594.8	3572.8	3311.7	2911.4
50°	4357.1	4352.6	4588.9	4916.0	5185.7	5200.8	4542.8	4069.4	4021.0	3648.9	3196.9
52.5°	3753.0	3751.9	4140.3	4684.7	5320.2	5770.5	5209.3	4590.7	4509.6	4005.8	3498.5
55°	2887.8	2908.6	3353.9	3997.3	5074.8	6044.6	5807.6	5169.3	5044.9	4364.9	3776.6
57.5°	2045.7	2076.0	2516.3	3089.4	4313.7	5882.6	6212.4	5749.1	5615.2	4722.9	4058.7
60°	1098.8	1125.9	1566.6	2250.6	3209.3	5277.9	6425.7	6252.4	6125.7	5062.9	4313.1
62.5°	654.7	663.7	846.0	1452.9	2170.6	4032.2	6335.1	6635.7	6531.6	5348.3	4534.4
65°	470.1	471.7	563.4	887.1	1317.8	2449.9	5699.6	6819.2	6787.1	5563.4	4698.2
67.5°	395.8	394.6	432.9	589.4	897.9	1227.1	4368.2	6559.8	6696.0	5699.6	4791.1
70°	339.5	341.1	386.1	431.7	675.0	694.6	2171.8	5711.4	6001.9	5735.6	4785.4
72.5°	252.8	258.4	300.0	393.5	509.4	478.0	749.8	4234.9	4760.1	5404.1	4537.2
75°	178.5	181.2	211.0	331.0	380.0	347.9	382.8	2189.2	2862.4	4143.2	3713.6
77.5°	137.4	142.4	159.9	231.3	374.3	244.3	234.2	757.7	1164.1	2502.7	2546.1
80°	74.3	83.3	115.4	167.2	262.9	172.8	115.9	301.8	394.6	1170.3	981.7
82.5°	38.2	42.7	80.5	120.4	149.8	150.9	57.4	125.6	162.7	361.4	134.6
85°	15.2	18.6	54.0	66.4	77.1	74.3	25.9	50.6	58.5	100.2	41.1
87.5°	3.4	5.6	19.7	15.2	14.7	15.8	6.1	11.8	11.3	11.8	7.3
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°	1009.9	1009.9	1009.9	1009.9	1009.9	1009.9	1009.9	1009.9	1009.9	1009.9	1009.9
2.5°	1016.1	1013.8	1007.7	1000.9	993.0	988.5	985.6	985.1	981.1	978.4	981.1
5°	1033.0	1030.7	1018.8	1004.8	989.6	977.7	966.6	956.4	941.8	939.0	937.9
7.5°	1066.7	1060.6	1041.4	1022.2	993.5	959.2	917.6	869.7	827.0	814.0	807.8
10°	1108.4	1099.9	1075.7	1042.0	978.4	884.9	784.1	690.7	616.4	595.5	587.7
12.5°	1155.7	1148.4	1116.3	1053.8	914.7	745.3	591.1	475.1	403.0	385.0	380.0
15°	1212.0	1201.3	1156.8	1035.8	801.0	566.3	405.9	337.2	311.3	307.9	304.5
17.5°	1271.6	1254.2	1192.8	971.1	647.9	402.5	313.5	293.9	282.6	279.2	277.6
20°	1326.2	1303.7	1214.2	873.1	484.1	313.5	280.8	267.9	257.8	253.9	251.6
22.5°	1380.9	1348.8	1214.2	739.6	363.1	278.1	257.8	246.0	234.2	229.1	226.3
25°	1437.7	1394.9	1192.8	591.1	292.1	255.0	235.9	222.9	212.8	206.6	204.4
27.5°	1492.9	1433.8	1143.9	450.4	260.0	234.7	215.6	203.3	193.6	189.1	189.1
30°	1545.2	1472.0	1075.2	341.7	239.2	215.0	197.0	186.3	176.7	172.3	172.8
32.5°	1616.1	1520.5	1002.0	280.3	221.2	196.5	180.1	170.0	161.5	158.2	158.2
35°	1714.6	1591.9	939.0	275.3	206.0	181.2	164.9	155.4	146.9	144.1	144.1
37.5°	1854.2	1707.3	905.8	309.0	193.6	167.8	152.5	142.4	134.6	132.3	131.7
40°	2026.5	1863.9	923.7	342.9	185.2	155.9	141.2	131.2	124.4	121.6	121.1
42.5°	2230.9	2057.0	1023.4	368.7	179.6	145.8	130.6	119.3	114.8	113.7	113.7
45°	2465.6	2269.1	1176.0	396.3	170.6	136.2	119.9	111.4	108.0	107.5	106.9
47.5°	2732.4	2502.2	1352.7	430.6	161.5	127.2	111.4	105.8	103.0	101.9	101.9
50°	2997.0	2737.0	1534.5	449.8	154.3	118.8	104.7	100.2	98.0	97.4	97.4
52.5°	3274.0	2978.4	1681.4	431.7	148.0	112.0	99.1	95.7	93.5	92.9	92.9
55°	3538.0	3173.8	1706.8	366.4	135.7	105.3	92.9	91.2	88.4	88.4	87.8
57.5°	3765.4	3271.7	1527.8	269.1	123.3	95.1	86.7	85.0	82.7	82.2	81.6
60°	3974.2	3243.6	1179.4	181.2	109.8	85.0	78.8	77.7	75.4	72.6	72.1
62.5°	4091.9	3119.7	806.7	118.2	96.2	74.3	69.8	69.3	64.2	58.5	57.4
65°	4136.4	2865.3	503.3	86.1	80.5	63.7	60.3	59.1	51.8	45.6	45.0
67.5°	4097.5	2446.5	253.9	68.2	63.7	52.9	49.5	49.5	44.5	38.8	38.2
70°	3942.2	1834.0	106.9	54.6	49.0	40.5	40.5	42.7	37.7	31.6	31.0
72.5°	3604.9	1233.9	56.9	41.6	36.6	28.7	33.2	34.8	29.8	23.7	23.7
75°	2865.8	752.7	39.4	31.0	23.1	20.3	25.3	26.4	20.3	15.8	15.2
77.5°	1960.1	432.3	26.4	19.7	14.7	11.8	17.4	16.3	10.7	7.3	7.9
80°	860.7	180.1	15.2	9.0	5.6	4.5	6.1	4.5	3.4	2.3	2.3
82.5°	100.8	42.2	5.6	3.4	2.3	1.1	0.5	0.0	0.0	0.0	0.0
85°	20.8	5.0	2.8	1.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	1.1	0.5	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)