

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: P961880

Luminaire Tested: **NAV-SB2B-727-U-T4FT-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P961880  
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-SB2B-727-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

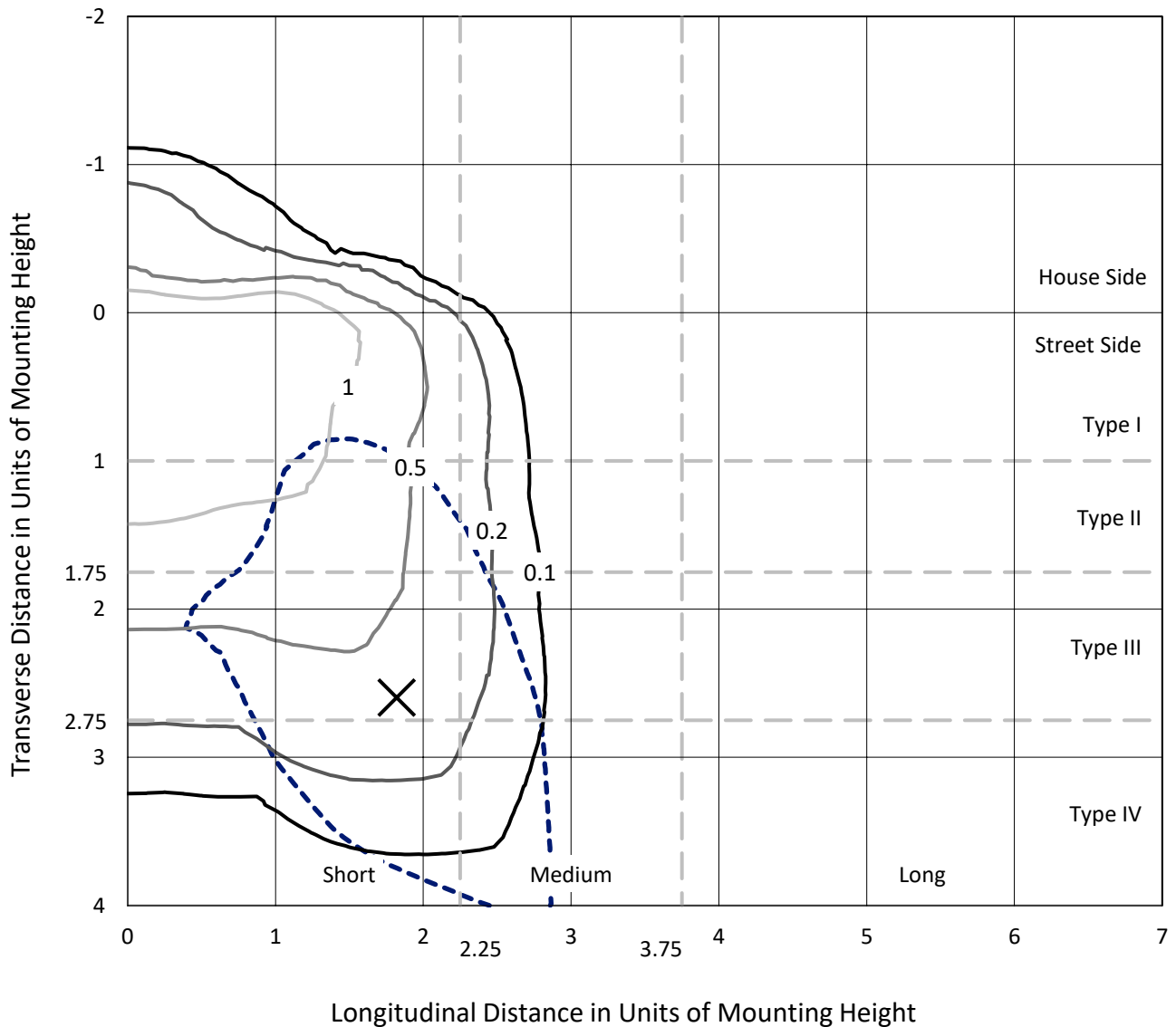
Lumens per Lamp: N/A  
Luminaire Lumens: 8105.7 lumens  
Efficiency: N/A  
Efficacy: 109.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 73.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

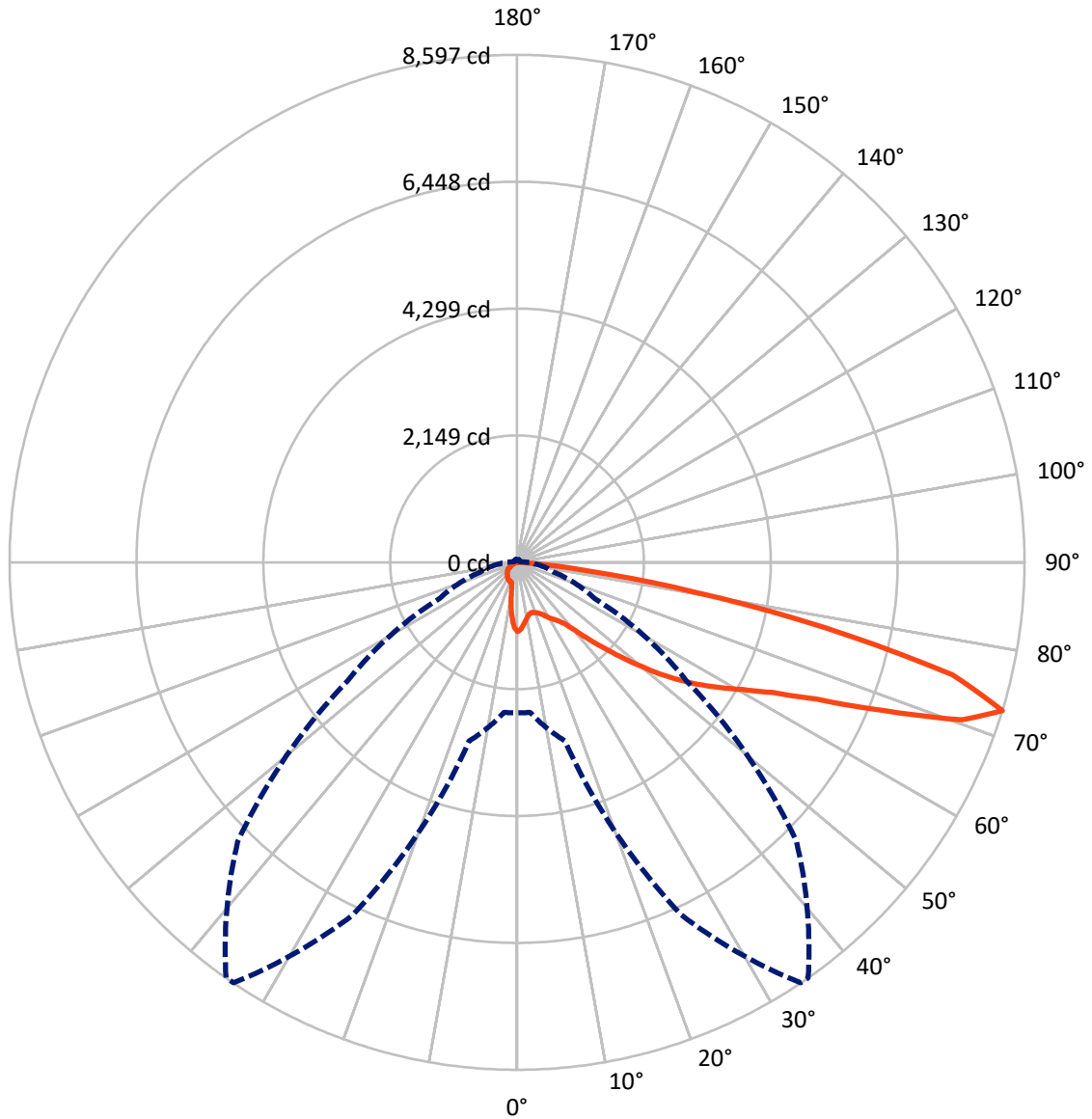
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	912.3	0.0	912.3
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	7193.4	0.0	7193.4
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	8105.7	0.0	8105.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.5	1.2
10°-20°	225.8	2.8
20°-30°	366.9	4.5
30°-40°	612.1	7.6
40°-50°	1158.1	14.3
50°-60°	1840.3	22.7
60°-70°	2276.5	28.1
70°-80°	1415.1	17.5
80°-90°	114.4	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°	8105.7	100.0
0°-180°	8105.7	100.0

**Coefficient of Utilization**

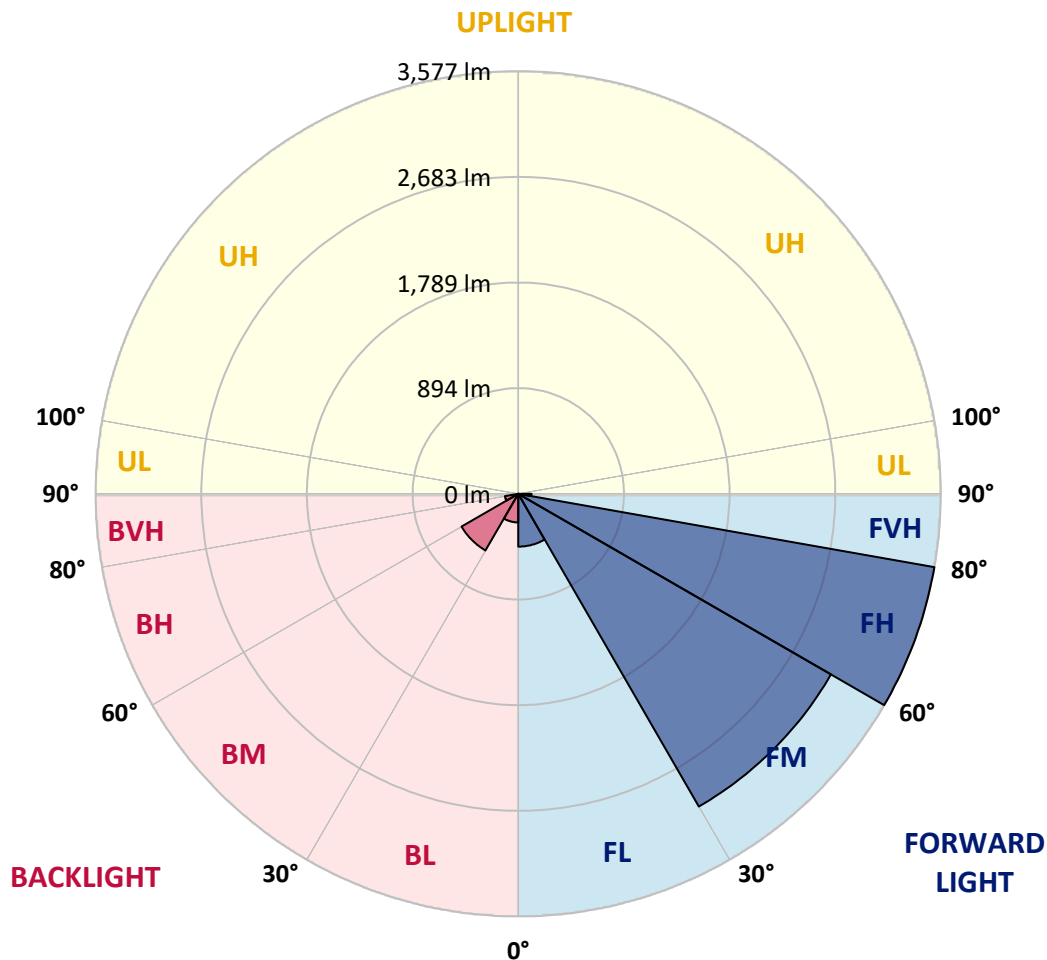


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	446.8	5.5			
FM (30°-60°)	3056.7	37.7			
FH (60°-80°)	3577.1	44.1			G2/5000
FVH (80°-90°)	112.8	1.4			G2/225
BL (0°-30°)	242.4	3.0	B1/500		
BM (30°-60°)	553.8	6.8	B1/1000		
BH (60°-80°)	114.5	1.4	B1/500		G1/500
BVH (80°-90°)	1.6	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°	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8
2.5°	1122.5	1132.0	1133.9	1136.8	1136.8	1140.3	1146.3	1154.6	1168.3	1175.4	1180.1
5°	1034.6	1041.7	1050.6	1057.8	1071.4	1073.2	1096.3	1119.0	1150.5	1174.2	1190.8
7.5°	946.1	954.5	966.4	983.6	1001.3	1006.8	1041.7	1079.7	1129.7	1174.2	1202.1
10°	883.8	884.4	895.0	912.2	940.7	947.3	990.0	1044.2	1106.5	1167.1	1212.8
12.5°	848.7	852.9	857.6	870.7	898.0	902.2	947.9	1011.5	1083.3	1162.9	1225.3
15°	848.7	851.7	854.6	861.2	883.1	886.7	927.1	990.7	1071.4	1164.7	1245.5
17.5°	857.6	862.3	860.0	867.8	890.9	893.3	928.9	984.7	1070.8	1176.0	1276.3
20°	879.0	882.5	877.8	882.5	905.7	910.5	947.3	996.0	1081.0	1195.6	1315.0
22.5°	912.9	914.6	903.3	906.9	930.7	936.6	979.4	1028.1	1105.3	1227.0	1366.6
25°	955.6	959.2	942.0	946.1	968.7	975.8	1025.1	1076.1	1143.9	1270.4	1432.5
27.5°	1004.9	1006.8	991.9	991.3	1020.4	1030.4	1080.4	1135.6	1195.6	1325.0	1515.7
30°	1061.4	1066.7	1052.5	1050.1	1086.9	1095.2	1144.5	1208.7	1271.6	1407.0	1633.8
32.5°	1105.9	1110.1	1101.8	1107.7	1145.1	1151.6	1222.3	1312.0	1391.0	1523.5	1794.9
35°	1170.0	1172.4	1153.4	1164.1	1206.8	1223.4	1328.6	1456.9	1541.2	1669.5	2005.1
37.5°	1402.3	1402.3	1321.5	1268.6	1309.6	1324.5	1474.2	1639.3	1726.5	1865.5	2270.0
40°	1723.5	1718.2	1600.0	1492.0	1486.6	1515.7	1681.4	1869.1	1965.8	2100.7	2568.1
42.5°	2066.3	2058.0	1897.0	1790.1	1772.3	1782.4	1920.7	2152.4	2251.0	2387.6	2888.9
45°	2370.3	2368.0	2220.7	2077.0	2044.9	2077.0	2219.5	2483.8	2554.5	2698.2	3209.0
47.5°	2625.1	2625.1	2517.7	2423.8	2407.2	2426.2	2624.0	2851.4	2844.9	3029.0	3520.8
50°	2918.6	2916.2	2814.0	2773.6	2790.9	2817.6	3089.7	3238.7	3145.4	3353.9	3799.4
52.5°	3124.1	3138.3	3103.3	3096.7	3184.7	3231.0	3562.4	3617.6	3414.5	3662.1	4007.9
55°	3286.8	3303.5	3343.9	3389.6	3558.8	3619.4	4020.3	3976.9	3639.6	3929.4	4127.8
57.5°	3517.2	3493.5	3555.8	3646.1	3919.9	3993.0	4464.0	4316.1	3820.7	4146.2	4140.9
60°	3797.0	3800.5	3811.3	3925.2	4280.4	4374.3	4901.0	4636.8	3937.1	4279.3	3996.0
62.5°	4133.1	4138.4	4160.5	4335.6	4764.5	4853.0	5366.7	4899.3	3990.6	4241.9	3621.7
65°	4109.9	4132.6	4377.9	4977.1	5500.4	5587.7	5910.2	5083.4	3909.9	3899.7	2948.8
67.5°	3744.1	3780.9	4191.3	5743.3	6609.8	6707.2	6567.1	5119.7	3561.2	3032.6	1923.7
70°	3264.2	3277.3	3770.9	6432.2	7894.4	7993.1	7155.0	4721.2	2702.4	1691.5	861.8
72.5°	2549.2	2552.1	3131.2	6592.0	8591.8	8597.1	6693.6	3504.8	1453.3	649.7	299.3
75°	1821.0	1803.2	2097.1	5345.9	7558.9	7619.4	5018.1	1644.0	555.3	307.1	149.0
77.5°	976.4	996.0	1186.6	3170.4	5221.8	5325.2	2738.0	474.0	282.7	209.1	98.6
80°	301.8	318.4	486.5	1451.6	2957.7	3020.2	1015.1	210.8	197.2	149.0	64.8
82.5°	95.0	98.6	226.8	610.0	1227.6	1256.1	294.0	119.4	134.8	98.6	38.0
85°	27.4	27.9	101.0	227.4	303.5	309.4	82.5	46.3	77.2	61.2	19.6
87.5°	3.0	9.5	38.0	38.0	26.8	26.1	8.9	10.1	21.9	7.7	3.6
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°	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8	1174.8
2.5°	1177.2	1177.7	1170.0	1157.0	1142.7	1130.9	1116.0	1104.1	1095.8	1093.5	1097.6
5°	1185.5	1181.3	1159.4	1119.5	1072.0	1031.0	985.3	949.0	925.4	915.2	918.8
7.5°	1197.9	1186.0	1138.0	1059.5	968.7	888.0	806.0	742.4	702.0	681.8	684.8
10°	1208.7	1184.9	1102.3	972.8	833.8	711.6	601.1	524.4	481.6	461.5	462.1
12.5°	1218.7	1184.3	1056.0	870.1	681.8	532.2	429.4	391.4	379.6	375.4	374.1
15°	1237.8	1186.0	997.8	752.6	530.3	402.1	364.7	364.1	366.4	365.3	364.7
17.5°	1263.9	1187.9	931.8	627.8	409.2	354.5	352.8	358.1	361.7	359.9	359.4
20°	1297.8	1194.9	861.8	504.2	351.6	342.7	346.9	351.6	354.5	351.6	351.0
22.5°	1345.2	1207.4	785.2	405.1	333.2	335.6	339.2	344.5	347.5	343.3	342.7
25°	1403.4	1227.0	709.7	352.2	324.3	327.3	332.6	338.6	342.1	337.9	337.3
27.5°	1478.9	1258.5	640.2	340.3	315.4	317.1	324.9	333.7	338.6	333.2	333.2
30°	1588.1	1310.2	580.3	345.6	310.1	305.9	316.5	329.0	334.4	329.6	329.0
32.5°	1733.1	1383.2	543.5	353.9	307.7	292.8	302.9	319.0	327.9	324.9	324.9
35°	1923.1	1494.3	529.2	363.5	305.9	279.1	286.3	303.5	319.0	322.0	322.0
37.5°	2153.6	1648.7	533.3	367.7	300.5	267.8	271.4	286.3	306.5	316.0	318.4
40°	2415.5	1828.7	557.1	363.5	294.6	258.4	258.9	270.2	288.0	302.3	307.1
42.5°	2685.7	2038.9	601.1	348.1	289.3	250.0	248.3	255.9	267.8	278.0	282.1
45°	2942.9	2255.1	644.4	326.7	282.7	241.7	237.6	240.6	242.9	247.0	249.5
47.5°	3167.5	2407.2	631.9	307.1	273.8	232.3	225.1	223.9	216.8	216.2	215.6
50°	3322.4	2440.4	561.3	287.4	260.8	221.5	210.2	203.2	190.6	184.7	185.3
52.5°	3371.7	2309.2	458.5	267.8	239.3	207.3	191.3	180.0	164.5	159.2	158.6
55°	3306.3	2052.0	366.4	244.2	209.6	188.3	170.5	155.6	143.1	136.6	136.6
57.5°	3146.6	1724.8	289.9	216.2	178.1	166.9	149.0	134.3	123.5	117.0	115.8
60°	2881.7	1369.6	229.3	183.0	152.0	143.7	125.4	115.8	106.3	98.6	96.8
62.5°	2479.7	977.6	180.0	144.9	127.1	117.6	106.9	99.7	88.5	77.8	76.1
65°	1935.0	598.1	139.0	106.3	102.2	97.4	90.9	84.4	70.7	60.0	58.2
67.5°	1220.6	283.3	99.2	80.2	80.8	78.4	75.4	70.1	60.0	50.5	49.3
70°	537.5	137.2	65.3	61.2	60.0	60.0	62.3	60.6	51.0	42.1	40.4
72.5°	183.0	73.7	48.7	46.3	43.4	42.7	52.3	50.5	41.0	32.7	30.9
75°	95.6	49.3	35.7	33.2	26.1	31.5	41.6	39.2	29.1	21.4	19.6
77.5°	62.3	35.1	24.4	21.4	14.9	20.8	30.9	27.4	17.2	10.7	9.5
80°	39.2	23.2	14.2	10.1	7.2	11.3	16.6	11.9	6.6	2.4	1.7
82.5°	20.8	11.9	5.3	3.6	3.0	3.6	4.2	3.0	1.2	0.0	0.0
85°	8.3	4.2	1.7	1.2	0.6	0.0	1.2	0.6	0.0	0.0	0.0
87.5°	3.0	0.6	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)