

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: P967095

Luminaire Tested: **NAV-SB4D-722-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967095
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-722-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29443.1 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

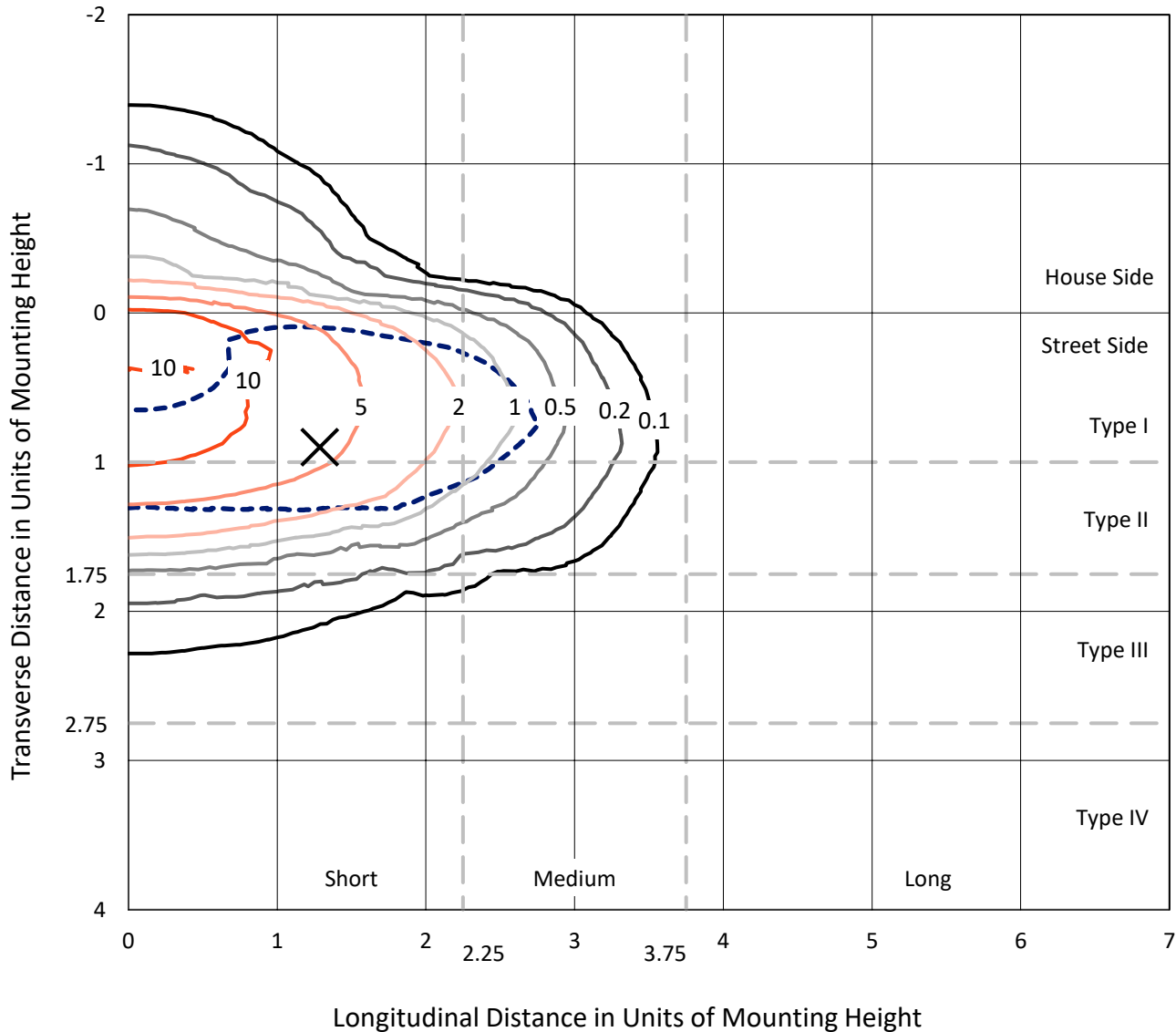
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P967095
 CATALOG NUMBER: NAV-SB4D-722-U-AFL-HSS

Iso-Footcandle Lines of Horizontal Illumination

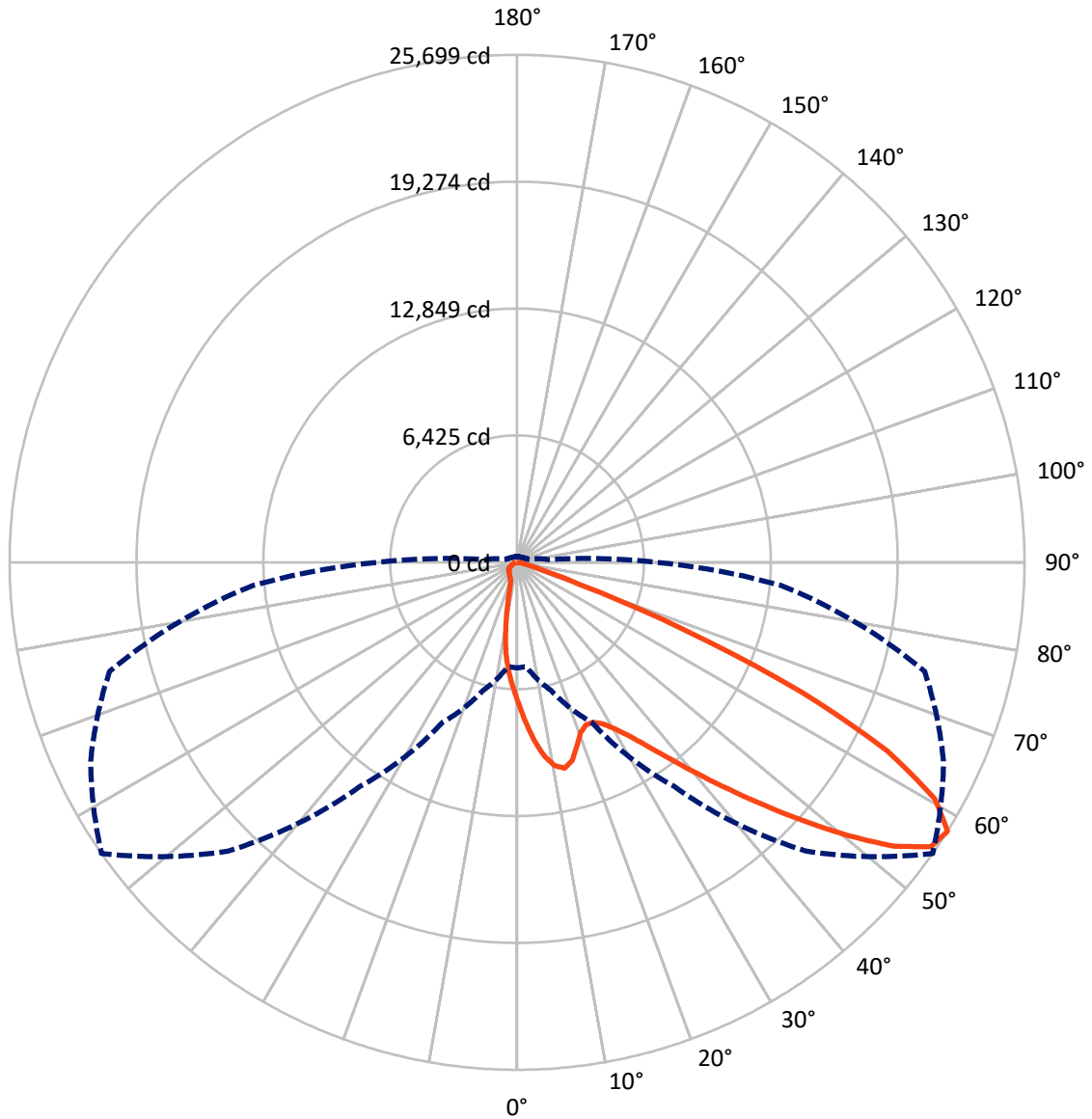
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.3 fc
 Type II - Short - N/A

REPORT NUMBER: P967095
CATALOG NUMBER: NAV-SB4D-722-U-AFL-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P967095
 CATALOG NUMBER: NAV-SB4D-722-U-AFL-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2299.4	0.0	2299.4
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	27143.7	0.0	27143.7
	% Fixture	92.2	0.0	92.2
Total	Lumens	29443.1	0.0	29443.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	660.2	2.2
10°-20°	1594.6	5.4
20°-30°	2551.4	8.7
30°-40°	4318.3	14.7
40°-50°	7089.8	24.1
50°-60°	7792.2	26.5
60°-70°	4469.6	15.2
70°-80°	913.3	3.1
80°-90°	53.9	0.2
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°	29443.1	100.0
0°-180°	29443.1	100.0

Coefficient of Utilization

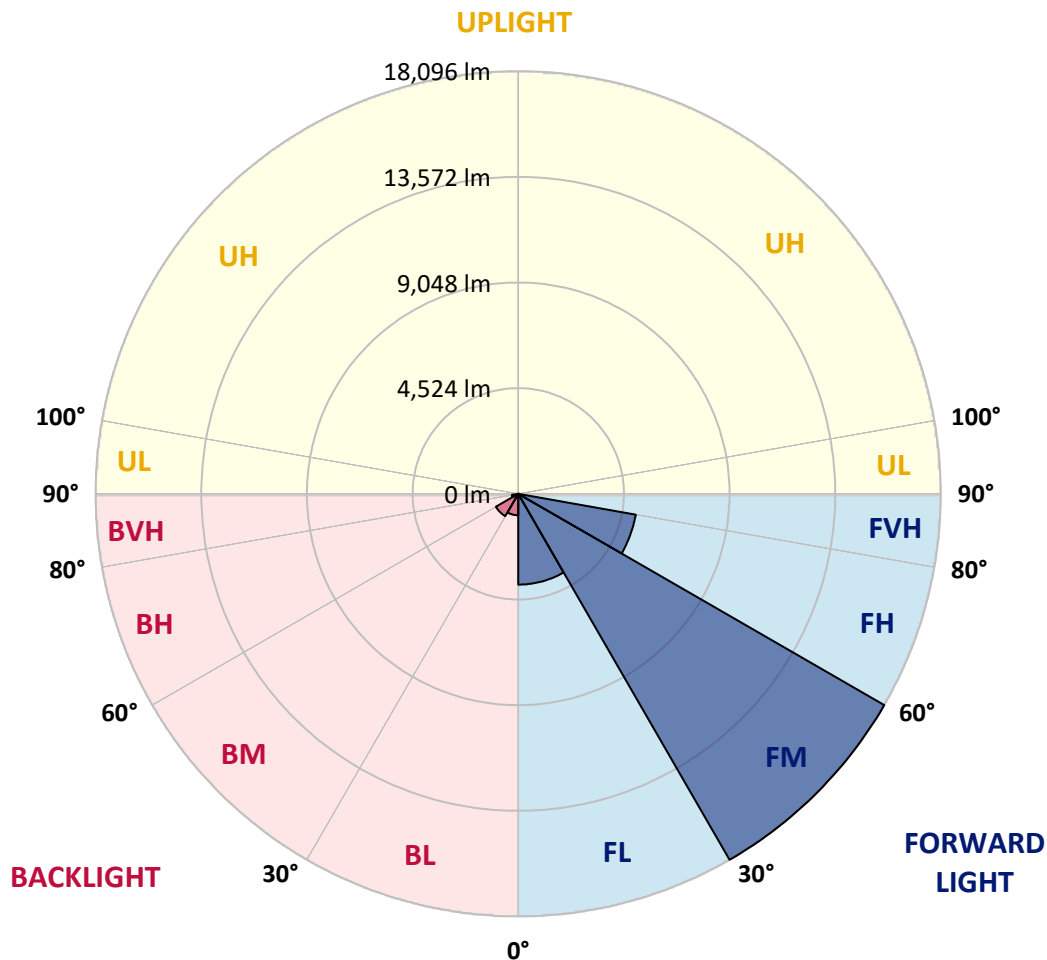


REPORT NUMBER: P967095
 CATALOG NUMBER: NAV-SB4D-722-U-AFL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3888.1	13.2			
FM (30°-60°)	18096.0	61.5			
FH (60°-80°)	5109.4	17.4			G3/7500
FVH (80°-90°)	50.2	0.2			G1/100
BL (0°-30°)	918.0	3.1	B2/1000		
BM (30°-60°)	1104.3	3.8	B2/2500		
BH (60°-80°)	273.5	0.9	B1/500		G1/500
BVH (80°-90°)	3.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
 Type II Short



REPORT NUMBER: P967095
 CATALOG NUMBER: NAV-SB4D-722-U-AFL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7095.0	7095.0	7095.0	7095.0	7095.0	7095.0	7095.0	7095.0	7095.0	7095.0	7095.0
2.5°	8803.5	8692.7	8676.4	8654.6	8444.1	8286.1	8057.3	7806.7	7525.3	7238.4	7111.4
5°	10170.6	10083.4	10067.0	9965.5	9725.7	9457.1	9050.3	8536.6	8011.9	7394.7	7129.6
7.5°	10435.6	10419.3	10493.7	10490.1	10457.5	10245.0	9901.9	9290.0	8502.1	7587.0	7176.7
10°	9253.7	9295.5	9517.0	9711.3	10236.0	10540.9	10466.5	9961.8	9006.8	7806.7	7229.4
12.5°	8177.1	8128.1	8286.1	8505.8	9115.7	10023.5	10700.7	10522.8	9584.2	8055.5	7307.5
15°	7501.8	7481.8	7570.8	7672.4	8137.2	9052.2	10428.3	10978.5	10139.7	8349.5	7425.5
17.5°	7285.7	7269.4	7296.6	7322.0	7623.3	8331.4	9780.2	11258.1	10671.7	8685.4	7556.2
20°	7461.8	7440.1	7436.4	7416.4	7541.6	8024.6	9193.8	11278.1	11149.1	8990.5	7668.7
22.5°	7975.6	7950.2	7861.2	7781.3	7792.3	8066.3	8932.4	11078.3	11508.6	9275.5	7739.6
25°	8906.9	8865.2	8680.0	8411.4	8240.7	8356.8	8972.3	10815.1	11851.8	9498.8	7705.1
27.5°	10072.6	10018.0	9780.2	9380.8	8990.5	8848.8	9261.0	10633.6	12136.8	9669.4	7630.6
30°	11214.5	11143.7	10909.5	10599.0	10028.9	9582.3	9782.1	10713.4	12476.3	9847.4	7532.6
32.5°	12447.2	12380.1	12069.6	11684.7	11212.7	10611.7	10495.6	11103.7	12892.0	10096.1	7463.6
35°	14006.7	13901.5	13460.3	12935.6	12434.5	11826.3	11461.4	11777.4	13445.7	10475.6	7501.8
37.5°	15782.3	15640.8	15165.1	14440.7	13787.1	13106.3	12637.8	12703.2	14257.3	10983.9	7619.7
40°	17456.3	17327.3	16888.0	16205.4	15384.7	14558.7	14059.4	13914.2	15377.5	11603.0	7826.7
42.5°	18460.2	18344.0	18158.9	17870.2	17178.5	16336.0	15706.1	15392.0	16702.8	12343.8	8079.0
45°	18516.5	18414.8	18663.6	18999.5	18863.3	18302.3	17534.4	16958.8	18033.6	13039.1	8340.5
47.5°	17616.1	17547.1	18302.3	19475.1	20059.8	20295.7	19587.6	18394.9	19132.0	13538.4	8447.6
50°	15161.4	15136.1	16690.1	18843.3	20515.4	22042.3	21753.6	19731.1	19983.5	13796.2	8346.0
52.5°	13146.2	13053.6	13959.6	16820.9	19852.7	22960.9	23870.5	21041.9	20578.9	13845.2	8108.2
55°	9970.9	9889.2	11025.7	13436.7	17715.9	22634.2	25419.2	22394.5	21005.6	13719.9	7681.5
57.5°	5348.6	5297.7	6733.7	8943.2	13848.8	20673.3	25698.7	23825.1	21365.1	13387.6	7084.2
60°	2082.4	2073.4	2610.7	4339.1	8416.8	16819.0	24288.1	24683.8	21590.2	12979.2	6584.9
62.5°	1259.9	1287.2	1374.3	1948.0	3718.2	10448.3	21036.5	23707.1	21740.9	12605.1	6172.8
65°	1042.1	1044.0	1054.8	1338.0	1781.0	4371.8	15836.9	20493.6	21368.7	11938.9	5588.2
67.5°	893.3	909.6	951.3	1062.1	1256.3	1917.2	9117.6	15874.9	19104.8	10388.5	4676.8
70°	704.4	726.2	778.9	873.3	969.4	1200.1	3369.6	10562.7	14595.0	7830.4	3536.7
72.5°	593.7	591.8	619.1	709.9	769.8	844.2	1296.3	5918.7	8482.1	3738.2	1750.2
75°	459.3	477.4	512.0	593.7	630.0	611.8	702.6	2162.3	3039.2	1132.9	595.5
77.5°	359.5	374.0	404.9	484.7	521.0	433.9	404.9	773.4	976.7	406.7	268.7
80°	161.5	174.2	275.9	357.6	424.9	299.6	219.7	395.8	433.9	185.2	136.1
82.5°	29.0	49.0	161.5	188.8	217.8	194.2	114.4	205.2	212.4	74.4	47.3
85°	1.8	3.6	56.3	69.0	87.1	63.6	34.5	81.7	70.8	25.4	18.1
87.5°	0.0	0.0	0.0	1.8	1.8	9.1	10.9	14.6	10.9	9.1	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

REPORT NUMBER: P967095
 CATALOG NUMBER: NAV-SB4D-722-U-AFL-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7095.0	7095.0	7095.0	7095.0	7095.0	7095.0	7095.0	7095.0	7095.0	7095.0
2.5°	6980.7	6722.9	6472.4	6267.2	6147.3	5944.0	5809.7	5787.9	5731.6	5780.6
5°	6846.4	6385.2	5918.7	5501.1	5157.9	4714.9	4384.5	4244.7	4123.1	4164.8
7.5°	6782.8	6054.8	5328.6	4615.1	3881.6	3173.5	2647.1	2427.4	2260.3	2283.9
10°	6697.5	5711.6	4573.3	3484.0	2501.8	1802.8	1439.7	1305.3	1230.9	1232.8
12.5°	6632.2	5301.3	3696.5	2362.0	1523.3	1151.1	1038.5	1005.8	984.0	985.8
15°	6599.5	4818.4	2830.4	1574.1	1089.3	975.0	947.7	933.2	918.6	916.9
17.5°	6544.9	4281.0	2071.5	1149.2	953.1	913.2	889.6	873.3	855.2	851.5
20°	6463.2	3671.0	1514.1	971.3	893.3	862.3	829.7	807.9	786.1	782.5
22.5°	6312.6	3026.5	1163.8	898.7	849.6	815.2	775.2	749.8	728.1	724.4
25°	6032.9	2421.9	980.4	853.3	811.5	769.8	726.2	691.7	671.8	668.1
27.5°	5678.9	1902.7	889.6	811.5	762.5	724.4	675.4	642.7	624.5	620.9
30°	5261.4	1465.1	836.9	764.3	704.4	671.8	628.2	601.0	590.1	590.1
32.5°	4811.1	1171.1	815.2	717.1	653.5	617.3	582.8	571.8	568.3	566.4
35°	4388.1	1016.7	804.3	679.0	608.2	573.7	559.1	561.0	568.3	568.3
37.5°	4012.3	967.7	798.8	651.8	568.3	537.4	546.4	562.8	555.6	555.6
40°	3672.8	973.1	795.2	631.8	535.6	517.4	535.6	522.9	504.7	502.9
42.5°	3413.1	1018.5	787.9	615.5	515.6	502.9	495.6	475.7	473.9	477.4
45°	3224.3	1058.4	786.1	608.2	493.8	470.3	461.1	441.2	477.4	486.6
47.5°	3001.1	1058.4	786.1	582.8	457.6	448.4	433.9	412.2	448.4	457.6
50°	2712.4	991.3	755.2	553.7	428.4	423.0	397.6	370.3	363.1	368.6
52.5°	2347.5	869.6	677.2	513.8	399.4	388.5	357.6	337.7	332.2	332.2
55°	1931.7	728.1	571.8	455.7	368.6	348.6	326.8	317.8	312.3	308.6
57.5°	1570.4	597.3	459.3	404.9	339.5	314.1	306.8	295.9	286.9	281.4
60°	1289.0	470.3	379.5	359.5	310.5	286.9	285.1	270.5	246.9	243.2
62.5°	994.9	344.9	319.5	312.3	281.4	261.5	257.8	228.8	192.5	185.2
65°	702.6	268.7	257.8	274.2	250.5	232.4	223.3	179.8	141.7	136.1
67.5°	493.8	225.1	203.4	239.6	217.8	194.2	188.8	152.5	118.0	114.4
70°	352.2	183.4	167.1	205.2	174.2	170.7	159.8	127.1	96.2	92.6
72.5°	248.8	139.8	128.9	177.9	119.8	147.1	130.7	98.0	72.6	69.0
75°	183.4	99.8	90.8	103.5	87.1	110.7	92.6	65.4	45.4	43.6
77.5°	134.4	63.6	54.4	50.8	50.8	69.0	50.8	27.3	20.0	18.1
80°	94.4	29.0	25.4	21.8	20.0	16.3	7.3	3.6	1.8	1.8
82.5°	56.3	12.7	12.7	9.1	5.4	0.0	0.0	0.0	0.0	0.0
85°	12.7	5.4	5.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.8	1.8	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

(END OF REPORT)