

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: P968955

Luminaire Tested: **NAV-SB5C-835-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968955
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-SB5C-835-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 615mA 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: 30665.9 lumens
Efficiency: N/A
Efficacy: 122.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

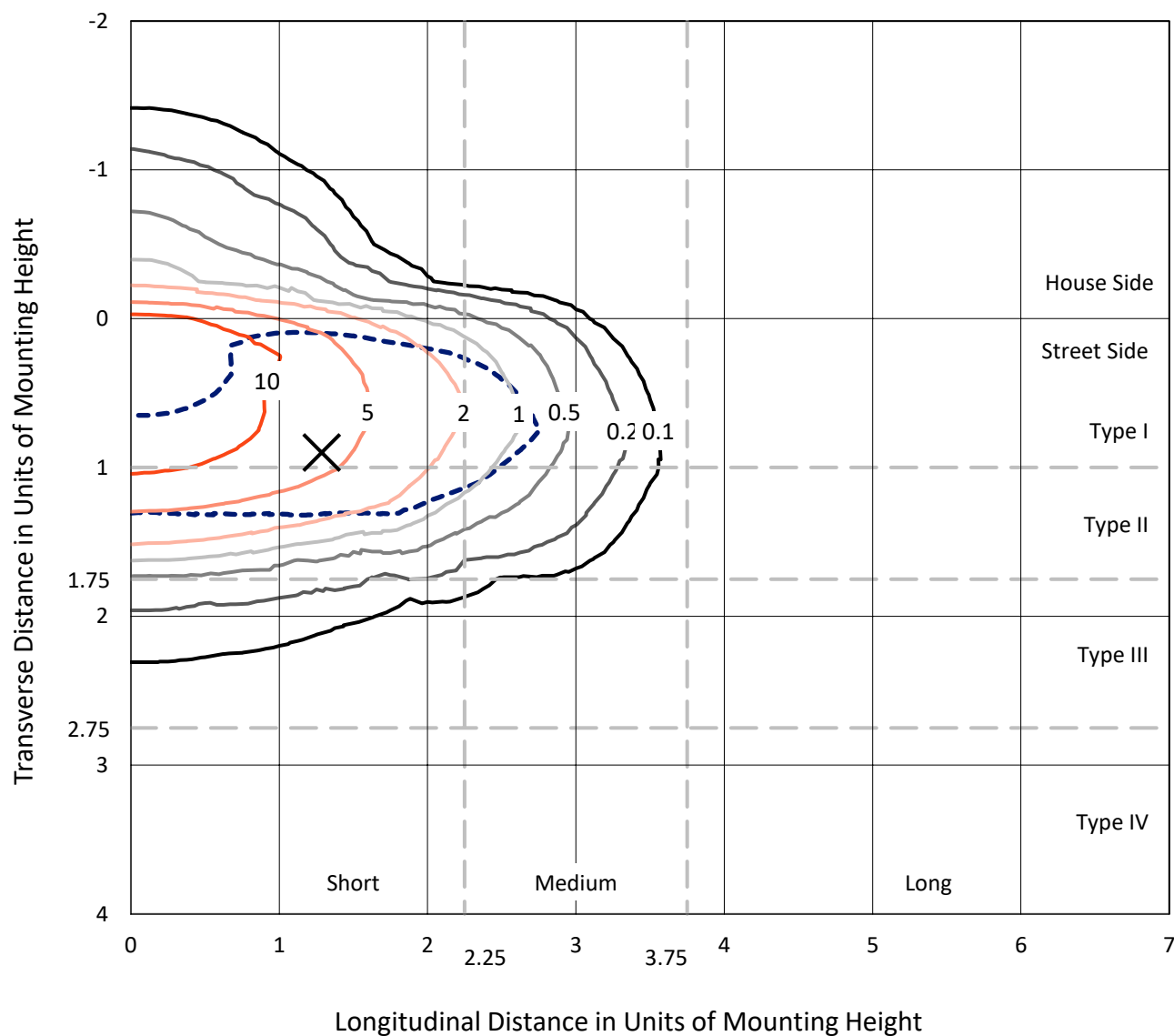
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P968955
 CATALOG NUMBER: NAV-SB5C-835-U-AFL-HSS

Iso-Footcandle Lines of Horizontal Illumination

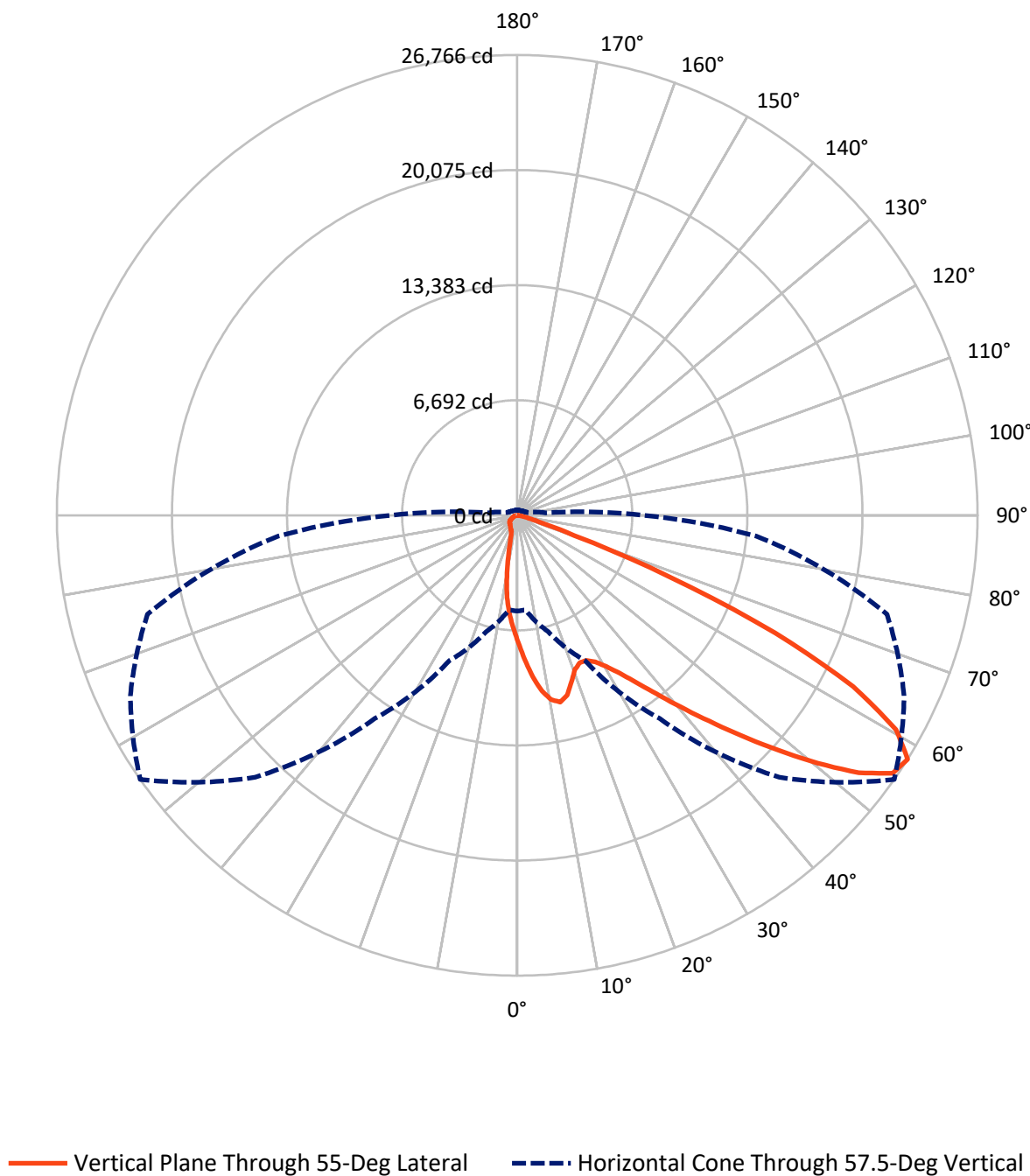
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.9 fc
 Type II - Short - N/A

REPORT NUMBER: P968955
CATALOG NUMBER: NAV-SB5C-835-U-AFL-HSS

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2394.9	0.0	2394.9
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	28271.1	0.0	28271.1
	% Fixture	92.2	0.0	92.2
Total	Lumens	30665.9	0.0	30665.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	687.6	2.2
10°-20°	1660.8	5.4
20°-30°	2657.3	8.7
30°-40°	4497.7	14.7
40°-50°	7384.2	24.1
50°-60°	8115.8	26.5
60°-70°	4655.2	15.2
70°-80°	951.2	3.1
80°-90°	56.1	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°	30665.9	100.0
0°-180°	30665.9	100.0

Coefficient of Utilization



REPORT NUMBER: P968955

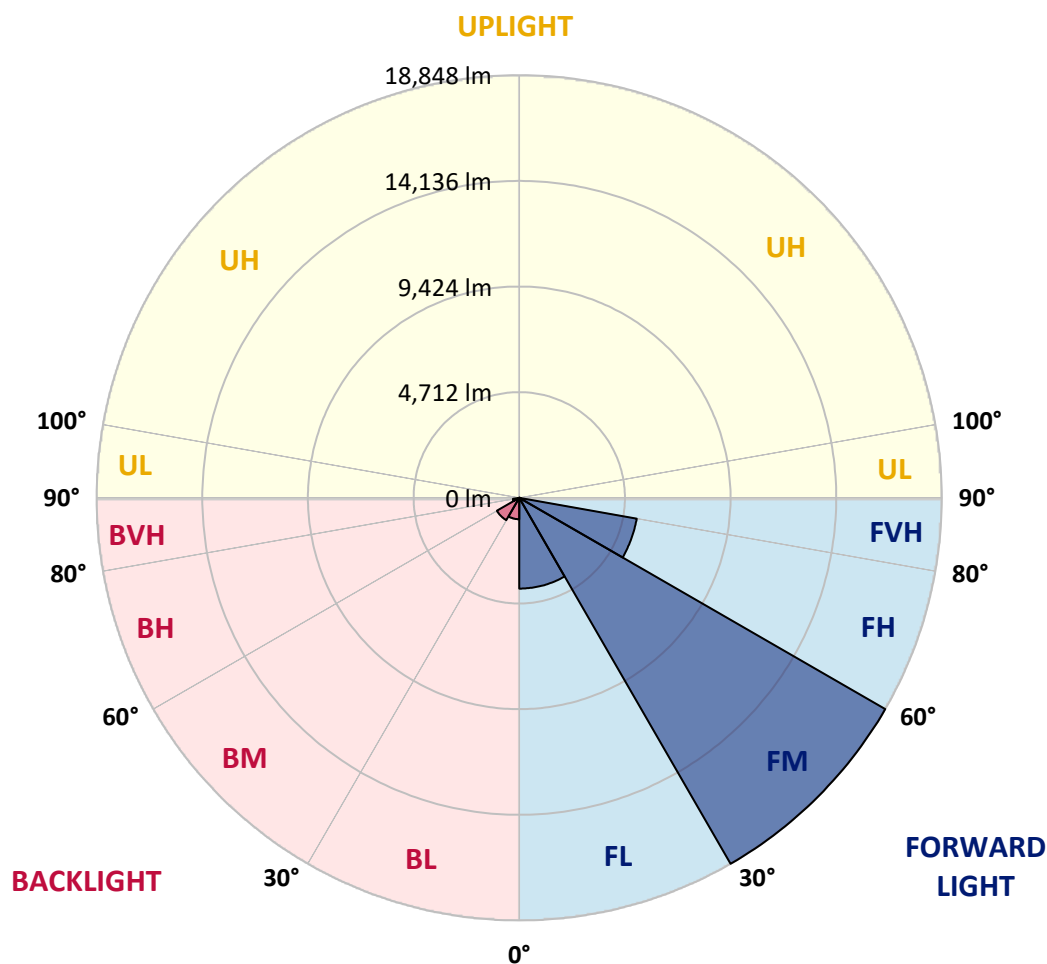
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4049.6	13.2			
FM	(30°-60°)	18847.5	61.5			
FH	(60°-80°)	5321.6	17.4			G3/7500
FVH	(80°-90°)	52.3	0.2			G1/100
BL	(0°-30°)	956.1	3.1	B2/1000		
BM	(30°-60°)	1150.2	3.8	B2/2500		
BH	(60°-80°)	284.8	0.9	B1/500		G1/500
BVH	(80°-90°)	3.8	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: P968955

CATALOG NUMBER: NAV-SB5C-835-U-AFL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7389.7	7389.7	7389.7	7389.7	7389.7	7389.7	7389.7	7389.7	7389.7	7389.7	7389.7
2.5°	9169.1	9053.7	9036.7	9014.1	8794.7	8630.2	8391.9	8131.0	7837.9	7539.1	7406.8
5°	10593.0	10502.3	10485.1	10379.3	10129.7	9849.8	9426.3	8891.2	8344.6	7701.7	7425.7
7.5°	10869.0	10852.0	10929.6	10925.8	10891.8	10670.5	10313.1	9675.9	8855.2	7902.1	7474.8
10°	9638.1	9681.5	9912.3	10114.6	10661.0	10978.7	10901.2	10375.5	9380.9	8131.0	7529.6
12.5°	8516.7	8465.7	8630.2	8859.0	9494.4	10439.8	11145.1	10959.8	9982.2	8390.0	7610.9
15°	7813.3	7792.5	7885.1	7991.0	8475.1	9428.2	10861.5	11434.4	10560.8	8696.4	7733.9
17.5°	7588.3	7571.3	7599.7	7626.1	7940.0	8677.4	10186.4	11725.6	11114.9	9046.2	7870.1
20°	7771.8	7749.0	7745.2	7724.4	7854.9	8357.8	9575.7	11746.4	11612.2	9363.9	7987.3
22.5°	8306.8	8280.4	8187.7	8104.5	8115.8	8401.4	9303.3	11538.4	11986.6	9660.7	8061.0
25°	9276.9	9233.4	9040.5	8760.7	8582.9	8703.9	9344.9	11264.2	12344.0	9893.3	8025.1
27.5°	10490.9	10434.1	10186.4	9770.4	9363.9	9216.4	9645.7	11075.1	12640.8	10071.0	7947.5
30°	11680.3	11606.5	11362.5	11039.2	10445.5	9980.3	10188.3	11158.4	12994.4	10256.4	7845.5
32.5°	12964.2	12894.2	12570.9	12170.0	11678.3	11052.5	10931.4	11564.9	13427.5	10515.5	7773.6
35°	14588.5	14478.8	14019.3	13472.8	12951.0	12317.5	11937.5	12266.5	14004.2	10910.6	7813.3
37.5°	16437.8	16290.3	15794.9	15040.4	14359.7	13650.6	13162.7	13230.8	14849.5	11440.1	7936.2
40°	18181.2	18047.0	17589.4	16878.4	16023.7	15163.3	14643.4	14492.1	16016.1	12085.0	8151.8
42.5°	19226.9	19105.9	18913.0	18612.4	17892.0	17014.6	16358.4	16031.3	17396.5	12856.4	8414.6
45°	19285.6	19179.7	19438.7	19788.5	19646.7	19062.4	18262.5	17663.1	18782.6	13580.6	8686.9
47.5°	18347.6	18275.8	19062.4	20283.9	20892.9	21138.7	20401.2	19158.9	19926.6	14100.6	8798.5
50°	15791.1	15764.6	17383.3	19625.9	21367.5	22957.7	22657.1	20550.5	20813.4	14369.2	8692.6
52.5°	13692.2	13595.8	14539.3	17519.4	20677.3	23914.6	24861.9	21915.8	21433.7	14420.2	8444.9
55°	10385.0	10299.9	11483.6	13994.7	18451.6	23574.2	26474.8	23324.6	21878.0	14289.7	8000.5
57.5°	5570.7	5517.7	7013.5	9314.7	14424.0	21532.0	26766.0	24814.6	22252.4	13943.7	7378.4
60°	2168.9	2159.5	2719.1	4519.3	8766.3	17517.6	25296.8	25709.0	22486.9	13518.2	6858.4
62.5°	1312.3	1340.7	1431.4	2029.0	3872.7	10882.3	21910.2	24691.7	22643.8	13128.7	6429.1
65°	1085.4	1087.3	1098.6	1393.6	1855.0	4553.4	16494.5	21344.8	22256.2	12434.7	5820.3
67.5°	930.3	947.3	990.9	1106.2	1308.5	1996.8	9496.2	16534.3	19898.2	10819.9	4871.0
70°	733.7	756.3	811.2	909.6	1009.7	1249.9	3509.6	11001.4	15201.2	8155.5	3683.5
72.5°	618.4	616.4	644.8	739.3	801.8	879.2	1350.1	6164.5	8834.4	3893.5	1822.9
75°	478.4	497.3	533.2	618.4	656.1	637.2	731.7	2252.1	3165.4	1180.0	620.2
77.5°	374.4	389.5	421.7	504.9	542.7	451.9	421.7	805.5	1017.3	423.5	279.8
80°	168.3	181.5	287.4	372.5	442.5	312.0	228.8	412.3	451.9	192.9	141.9
82.5°	30.2	51.0	168.3	196.7	226.9	202.3	119.1	213.7	221.2	77.5	49.2
85°	1.8	3.8	58.6	71.9	90.8	66.2	36.0	85.1	73.7	26.4	18.9
87.5°	0.0	0.0	0.0	1.8	1.8	9.4	11.4	15.2	11.4	9.4	7.6
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: P968955

CATALOG NUMBER: NAV-SB5C-835-U-AFL-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7389.7	7389.7	7389.7	7389.7	7389.7	7389.7	7389.7	7389.7	7389.7	7389.7
2.5°	7270.6	7002.1	6741.1	6527.5	6402.7	6190.9	6051.0	6028.2	5969.7	6020.7
5°	7130.7	6650.4	6164.5	5729.5	5372.1	4910.8	4566.6	4421.0	4294.3	4337.8
7.5°	7064.5	6306.2	5549.9	4806.7	4042.8	3305.3	2756.9	2528.2	2354.2	2378.8
10°	6975.6	5948.9	4763.3	3628.7	2605.7	1877.7	1499.5	1359.6	1282.1	1283.9
12.5°	6907.6	5521.5	3849.9	2460.1	1586.5	1198.8	1081.6	1047.6	1024.9	1026.7
15°	6873.5	5018.5	2948.0	1639.4	1134.6	1015.5	987.1	971.9	956.8	954.9
17.5°	6816.8	4458.9	2157.5	1197.0	992.7	951.1	926.6	909.6	890.6	886.8
20°	6731.7	3823.5	1577.1	1011.7	930.3	898.2	864.2	841.4	818.8	815.0
22.5°	6574.8	3152.2	1212.1	936.0	885.0	849.0	807.4	780.9	758.3	754.5
25°	6283.6	2522.5	1021.1	888.8	845.2	801.8	756.3	720.5	699.7	695.9
27.5°	5914.9	1981.7	926.6	845.2	794.2	754.5	703.5	669.4	650.5	646.7
30°	5479.9	1526.0	871.8	796.1	733.7	699.7	654.3	625.9	614.6	614.6
32.5°	5010.9	1219.6	849.0	746.9	680.7	642.9	607.0	595.6	591.8	590.0
35°	4570.4	1058.9	837.6	707.2	633.4	597.6	582.4	584.2	591.8	591.8
37.5°	4178.9	1007.9	832.0	678.9	591.8	559.8	569.2	586.2	578.6	578.6
40°	3825.3	1013.5	828.2	658.0	557.8	538.9	557.8	544.6	525.7	523.8
42.5°	3554.9	1060.8	820.6	641.0	537.0	523.8	516.2	495.4	493.5	497.3
45°	3358.3	1102.4	818.8	633.4	514.3	489.7	480.3	459.5	497.3	506.8
47.5°	3125.7	1102.4	818.8	607.0	476.5	467.1	451.9	429.3	467.1	476.5
50°	2825.0	1032.5	786.6	576.8	446.3	440.5	414.1	385.7	378.2	383.9
52.5°	2444.9	905.8	705.3	535.2	416.0	404.7	372.5	351.7	346.0	346.0
55°	2012.0	758.3	595.6	474.6	383.9	363.1	340.4	330.9	325.2	321.4
57.5°	1635.7	622.1	478.4	421.7	353.6	327.2	319.6	308.2	298.8	293.0
60°	1342.5	489.7	395.2	374.4	323.4	298.8	296.8	281.8	257.2	253.4
62.5°	1036.3	359.3	332.8	325.2	293.0	272.3	268.5	238.2	200.4	192.9
65°	731.7	279.8	268.5	285.6	261.0	242.0	232.6	187.2	147.5	141.9
67.5°	514.3	234.5	211.8	249.6	226.9	202.3	196.7	158.9	122.9	119.1
70°	366.8	191.0	173.9	213.7	181.5	177.7	166.4	132.3	100.2	96.5
72.5°	259.0	145.7	134.3	185.3	124.8	153.1	136.1	102.1	75.6	71.9
75°	191.0	104.0	94.5	107.8	90.8	115.3	96.5	68.1	47.3	45.4
77.5°	139.9	66.2	56.7	53.0	53.0	71.9	53.0	28.4	20.8	18.9
80°	98.3	30.2	26.4	22.7	20.8	17.0	7.6	3.8	1.8	1.8
82.5°	58.6	13.2	13.2	9.4	5.6	0.0	0.0	0.0	0.0	0.0
85°	13.2	5.6	5.6	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)