

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: P968893

Luminaire Tested: **NAV-SB5C-827-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968893
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-827-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 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: 28749.2 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

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

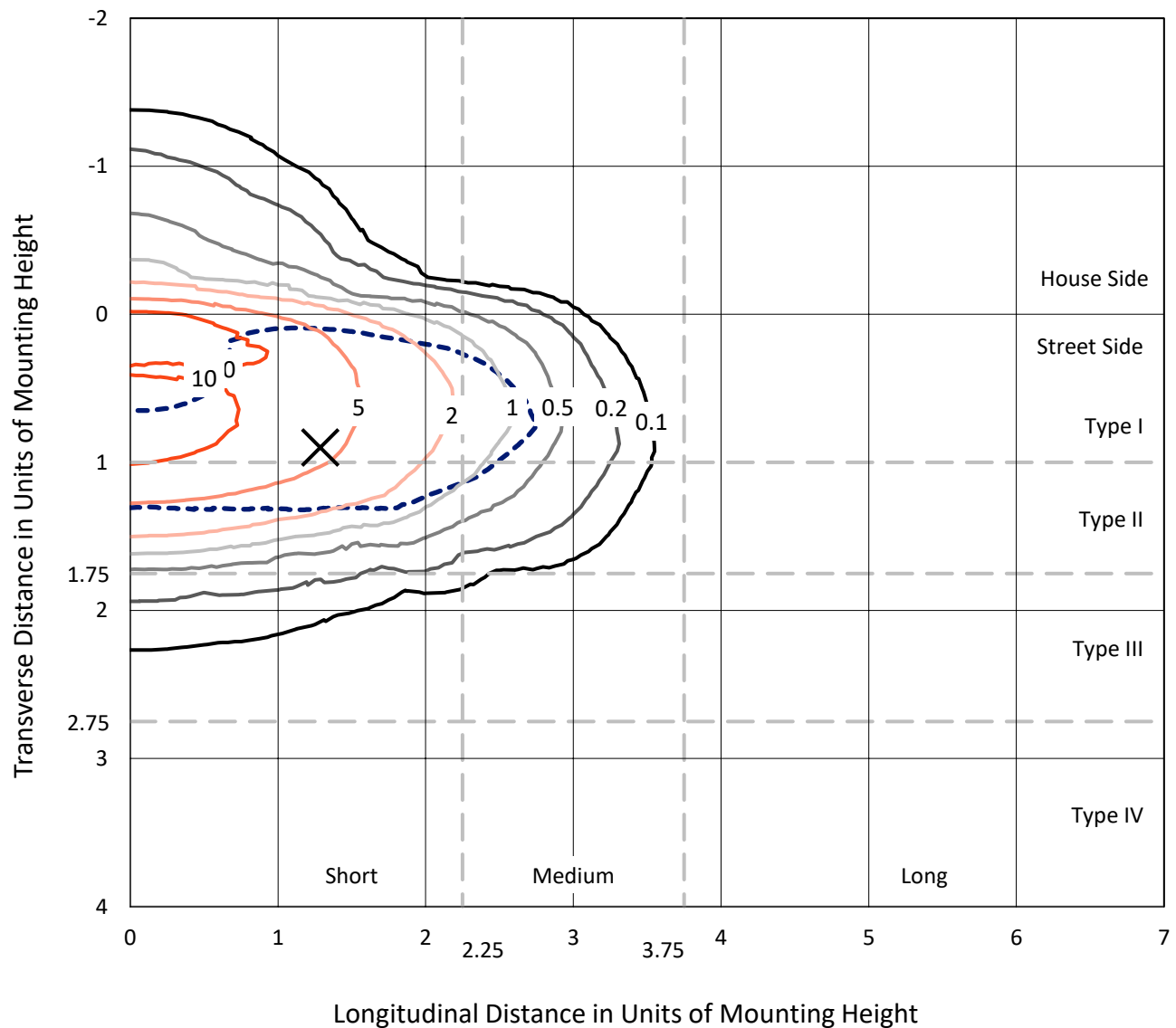


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Iso-Footcandle Lines of Horizontal Illumination

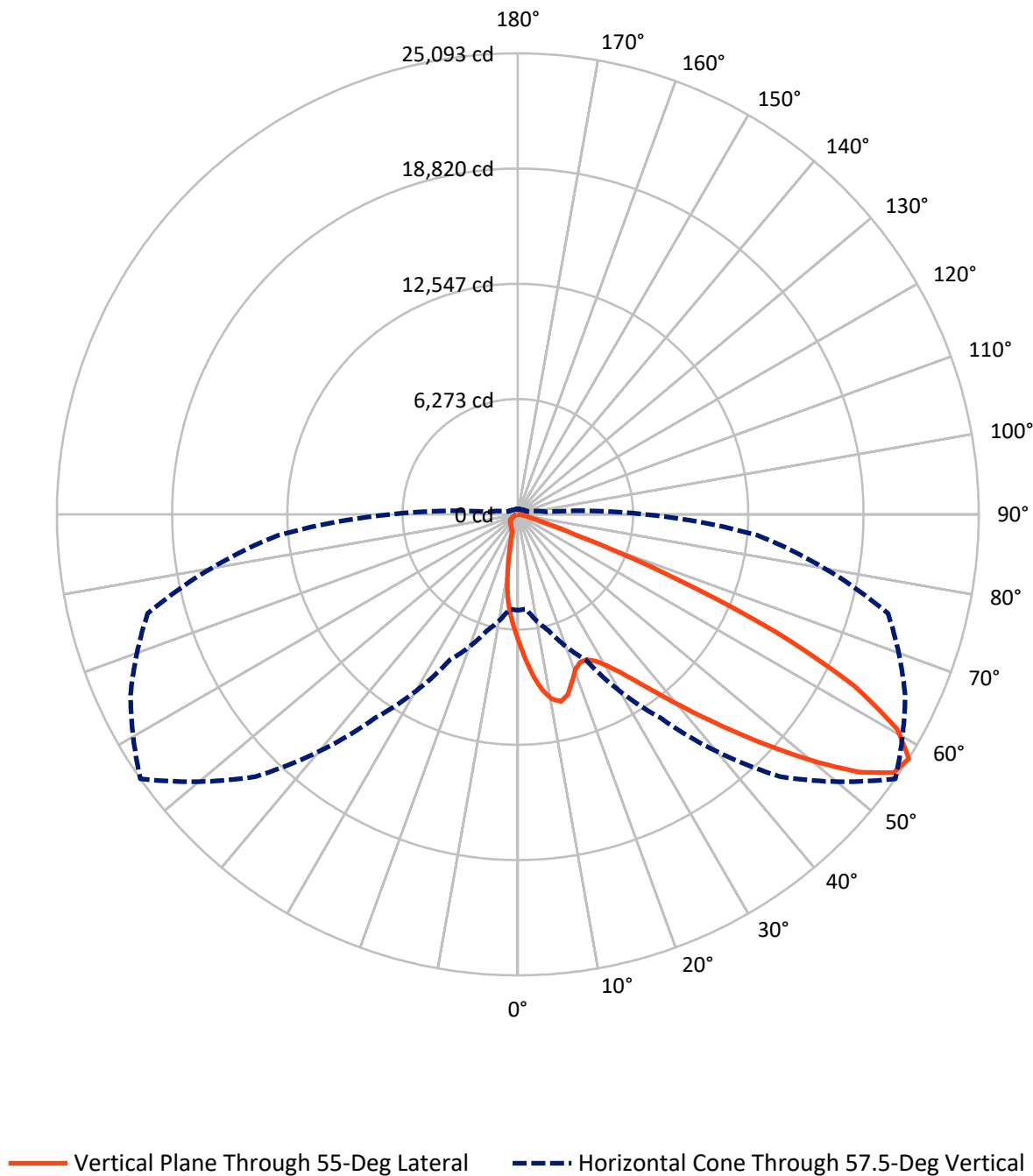
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.9 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2245.2	0.0	2245.2
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	26504.0	0.0	26504.0
	% Fixture	92.2	0.0	92.2
Total	Lumens	28749.2	0.0	28749.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	644.6	2.2
10°-20°	1557.0	5.4
20°-30°	2491.2	8.7
30°-40°	4216.5	14.7
40°-50°	6922.7	24.1
50°-60°	7608.5	26.5
60°-70°	4364.3	15.2
70°-80°	891.7	3.1
80°-90°	52.6	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°	28749.2	100.0
0°-180°	28749.2	100.0

Coefficient of Utilization



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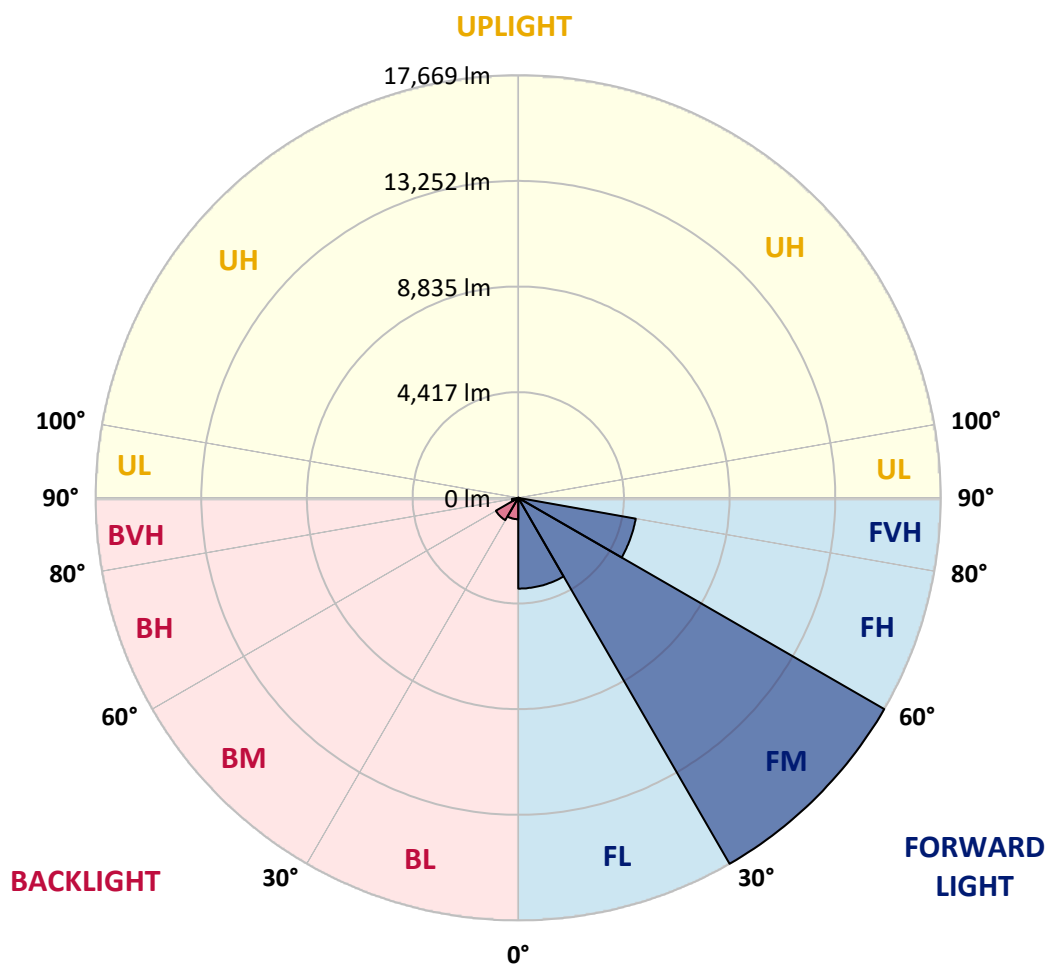
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3796.5	13.2			
FM	(30°-60°)	17669.5	61.5			
FH	(60°-80°)	4989.0	17.4			G2/5000
FVH	(80°-90°)	49.0	0.2			G1/100
BL	(0°-30°)	896.3	3.1	B2/1000		
BM	(30°-60°)	1078.3	3.8	B2/2500		
BH	(60°-80°)	267.0	0.9	B1/500		G1/500
BVH	(80°-90°)	3.5	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-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6927.9	6927.9	6927.9	6927.9	6927.9	6927.9	6927.9	6927.9	6927.9	6927.9	6927.9
2.5°	8596.0	8487.8	8471.9	8450.6	8245.0	8090.7	7867.4	7622.7	7348.0	7067.9	6943.8
5°	9930.8	9845.7	9829.9	9730.5	9496.5	9234.2	8837.0	8335.4	7823.1	7220.3	6961.5
7.5°	10189.7	10173.7	10246.4	10242.8	10210.9	10003.6	9668.5	9071.0	8301.7	7408.3	7007.6
10°	9035.6	9076.4	9292.6	9482.4	9994.7	10292.5	10219.9	9727.0	8794.5	7622.7	7059.1
12.5°	7984.4	7936.6	8090.7	8305.3	8900.9	9787.3	10448.5	10274.8	9358.2	7865.6	7135.2
15°	7325.0	7305.5	7392.3	7491.6	7945.4	8838.9	10182.6	10719.8	9900.7	8152.8	7250.4
17.5°	7114.0	7098.0	7124.7	7149.5	7443.8	8135.1	9549.7	10992.7	10420.2	8480.7	7378.2
20°	7285.9	7264.7	7261.1	7241.6	7363.9	7835.5	8977.2	11012.2	10886.3	8778.6	7488.0
22.5°	7787.6	7762.8	7675.9	7597.9	7608.6	7876.3	8721.8	10817.2	11237.4	9056.9	7557.1
25°	8697.0	8656.2	8475.4	8213.1	8046.5	8159.9	8760.9	10560.2	11572.5	9274.9	7523.5
27.5°	9835.2	9782.0	9549.7	9159.7	8778.6	8640.3	9042.8	10382.9	11850.7	9441.6	7450.8
30°	10950.2	10881.1	10652.4	10349.2	9792.5	9356.5	9551.5	10460.9	12182.2	9615.3	7355.1
32.5°	12153.8	12088.2	11785.1	11409.3	10948.4	10361.6	10248.2	10842.0	12588.2	9858.1	7287.7
35°	13676.7	13573.9	13143.1	12630.8	12141.4	11547.5	11191.3	11499.8	13128.9	10228.7	7325.0
37.5°	15410.4	15272.1	14807.7	14100.3	13462.1	12797.3	12340.0	12403.8	13921.2	10725.1	7440.2
40°	17044.8	16919.0	16490.0	15823.4	15022.2	14215.5	13728.0	13586.3	15015.0	11329.5	7642.3
42.5°	18025.1	17911.7	17730.9	17449.0	16773.6	15951.0	15335.9	15029.3	16309.2	12052.9	7888.7
45°	18080.1	17980.9	18223.7	18551.7	18418.7	17871.0	17121.1	16559.1	17608.6	12731.8	8143.9
47.5°	17200.8	17133.5	17871.0	19016.1	19586.9	19817.5	19126.0	17961.4	18681.0	13219.3	8248.6
50°	14804.1	14779.3	16296.8	18399.3	20031.9	21522.7	21240.9	19266.1	19512.5	13471.1	8149.3
52.5°	12836.4	12746.0	13630.6	16424.4	19384.9	22419.8	23307.9	20546.0	20094.0	13518.8	7917.0
55°	9735.9	9656.1	10765.8	13120.0	17298.3	22100.6	24820.1	21866.7	20510.6	13396.5	7500.4
57.5°	5222.5	5172.9	6575.1	8732.5	13522.4	20186.1	25093.0	23263.6	20861.5	13072.1	6917.2
60°	2033.3	2024.5	2549.2	4236.8	8218.4	16422.7	23715.6	24102.1	21081.4	12673.3	6429.7
62.5°	1230.3	1256.9	1341.9	1902.2	3630.6	10202.1	20540.7	23148.4	21228.5	12308.1	6027.3
65°	1017.5	1019.4	1029.9	1306.5	1739.0	4268.7	15463.6	20010.7	20865.1	11657.5	5456.5
67.5°	872.2	888.2	929.0	1037.1	1226.7	1872.0	8902.6	15500.8	18654.5	10143.6	4566.6
70°	687.8	709.1	760.6	852.7	946.7	1171.8	3290.1	10313.8	14251.0	7645.8	3453.3
72.5°	579.6	577.9	604.5	693.1	751.6	824.3	1265.8	5779.2	8282.2	3650.0	1708.9
75°	448.5	466.3	499.9	579.6	615.1	597.4	686.0	2111.3	2967.6	1106.2	581.5
77.5°	351.0	365.2	395.3	473.3	508.8	423.6	395.3	755.2	953.8	397.1	262.4
80°	157.7	170.1	269.5	349.2	414.8	292.5	214.5	386.4	423.6	180.8	132.9
82.5°	28.4	47.9	157.7	184.4	212.7	189.7	111.7	200.3	207.5	72.7	46.1
85°	1.7	3.6	54.9	67.3	85.1	62.0	33.7	79.7	69.2	24.8	17.7
87.5°	0.0	0.0	0.0	1.7	1.7	8.8	10.7	14.1	10.7	8.8	7.1
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6927.9	6927.9	6927.9	6927.9	6927.9	6927.9	6927.9	6927.9	6927.9	6927.9
2.5°	6816.1	6564.4	6319.8	6119.5	6002.5	5804.0	5672.8	5651.4	5596.5	5644.4
5°	6684.9	6234.7	5779.2	5371.4	5036.3	4603.8	4281.1	4144.7	4025.9	4066.7
7.5°	6622.9	5912.1	5203.0	4506.3	3790.1	3098.8	2584.6	2370.1	2207.0	2230.1
10°	6539.6	5577.0	4465.5	3401.9	2442.8	1760.3	1405.8	1274.6	1201.9	1203.7
12.5°	6475.8	5176.4	3609.3	2306.4	1487.3	1123.9	1014.0	982.1	960.8	962.6
15°	6443.9	4704.9	2763.7	1537.0	1063.6	951.9	925.4	911.2	897.0	895.2
17.5°	6390.7	4180.2	2022.7	1122.2	930.7	891.6	868.7	852.7	835.0	831.4
20°	6310.9	3584.4	1478.5	948.4	872.2	842.0	810.2	788.8	767.6	764.0
22.5°	6163.8	2955.2	1136.3	877.5	829.6	795.9	757.0	732.2	710.8	707.4
25°	5890.8	2364.8	957.2	833.2	792.4	751.6	709.1	675.4	655.9	652.4
27.5°	5545.1	1857.8	868.7	792.4	744.6	707.4	659.5	627.5	609.8	606.3
30°	5137.4	1430.6	817.2	746.3	687.8	655.9	613.4	586.8	576.2	576.2
32.5°	4697.8	1143.4	795.9	700.3	638.2	602.7	569.1	558.4	554.8	553.1
35°	4284.7	992.7	785.4	663.0	593.9	560.2	546.0	547.8	554.8	554.8
37.5°	3917.8	944.8	780.0	636.4	554.8	524.7	533.6	549.5	542.4	542.4
40°	3586.3	950.2	776.4	616.9	523.0	505.2	523.0	510.6	492.8	491.1
42.5°	3332.8	994.5	769.4	601.0	503.5	491.1	484.0	464.4	462.7	466.3
45°	3148.4	1033.5	767.6	593.9	482.2	459.1	450.3	430.8	466.3	475.1
47.5°	2930.4	1033.5	767.6	569.1	446.7	437.9	423.6	402.4	437.9	446.7
50°	2648.5	967.9	737.5	540.7	418.4	413.1	388.3	361.6	354.5	359.9
52.5°	2292.1	849.1	661.2	501.6	390.0	379.4	349.2	329.7	324.4	324.4
55°	1886.2	710.8	558.4	445.0	359.9	340.4	319.1	310.3	304.9	301.3
57.5°	1533.4	583.2	448.5	395.3	331.5	306.7	299.6	288.9	280.1	274.8
60°	1258.6	459.1	370.5	351.0	303.1	280.1	278.3	264.1	241.1	237.6
62.5°	971.5	336.8	312.0	304.9	274.8	255.2	251.7	223.3	187.9	180.8
65°	686.0	262.4	251.7	267.7	244.7	226.9	218.0	175.5	138.3	132.9
67.5°	482.2	219.9	198.5	234.0	212.7	189.7	184.4	148.9	115.2	111.7
70°	343.9	179.1	163.1	200.3	170.1	166.7	156.0	124.1	94.0	90.4
72.5°	242.8	136.5	125.9	173.7	117.0	143.6	127.6	95.7	70.9	67.3
75°	179.1	97.5	88.7	101.1	85.1	108.1	90.4	63.9	44.3	42.5
77.5°	131.2	62.0	53.2	49.6	49.6	67.3	49.6	26.5	19.5	17.7
80°	92.1	28.4	24.8	21.3	19.5	16.0	7.1	3.6	1.7	1.7
82.5°	54.9	12.4	12.4	8.8	5.3	0.0	0.0	0.0	0.0	0.0
85°	12.4	5.3	5.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	1.7	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)