

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: P882980

Luminaire Tested: **NAV-SB3A-835-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882980  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3A-835-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

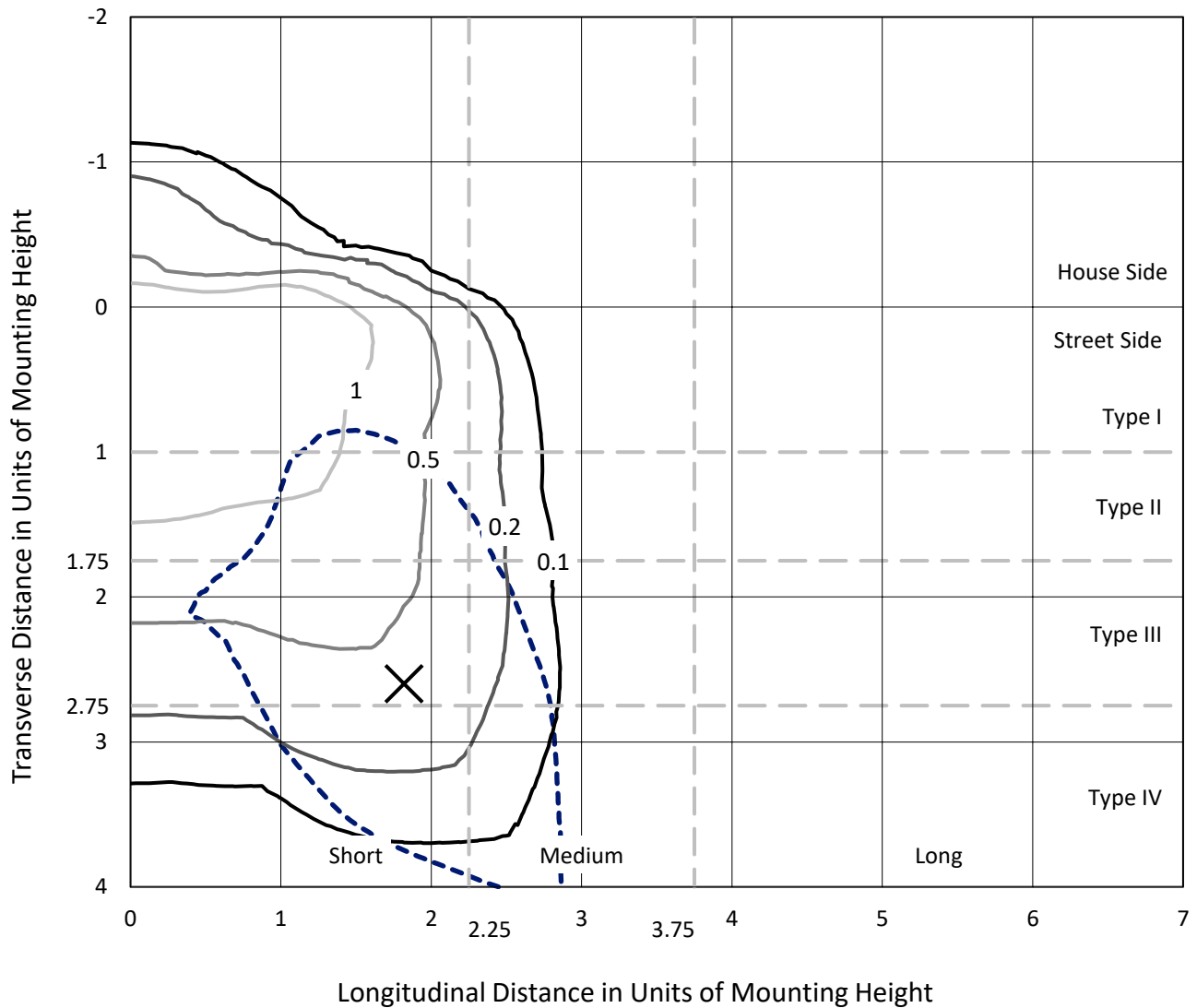
Lumens per Lamp: N/A  
Luminaire Lumens: 8596 lumens  
Efficiency: N/A  
Efficacy: 101.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 84.7  
Input Voltage (V): 120.0  
Input Current (Ain): 0.717  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 11.969  
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

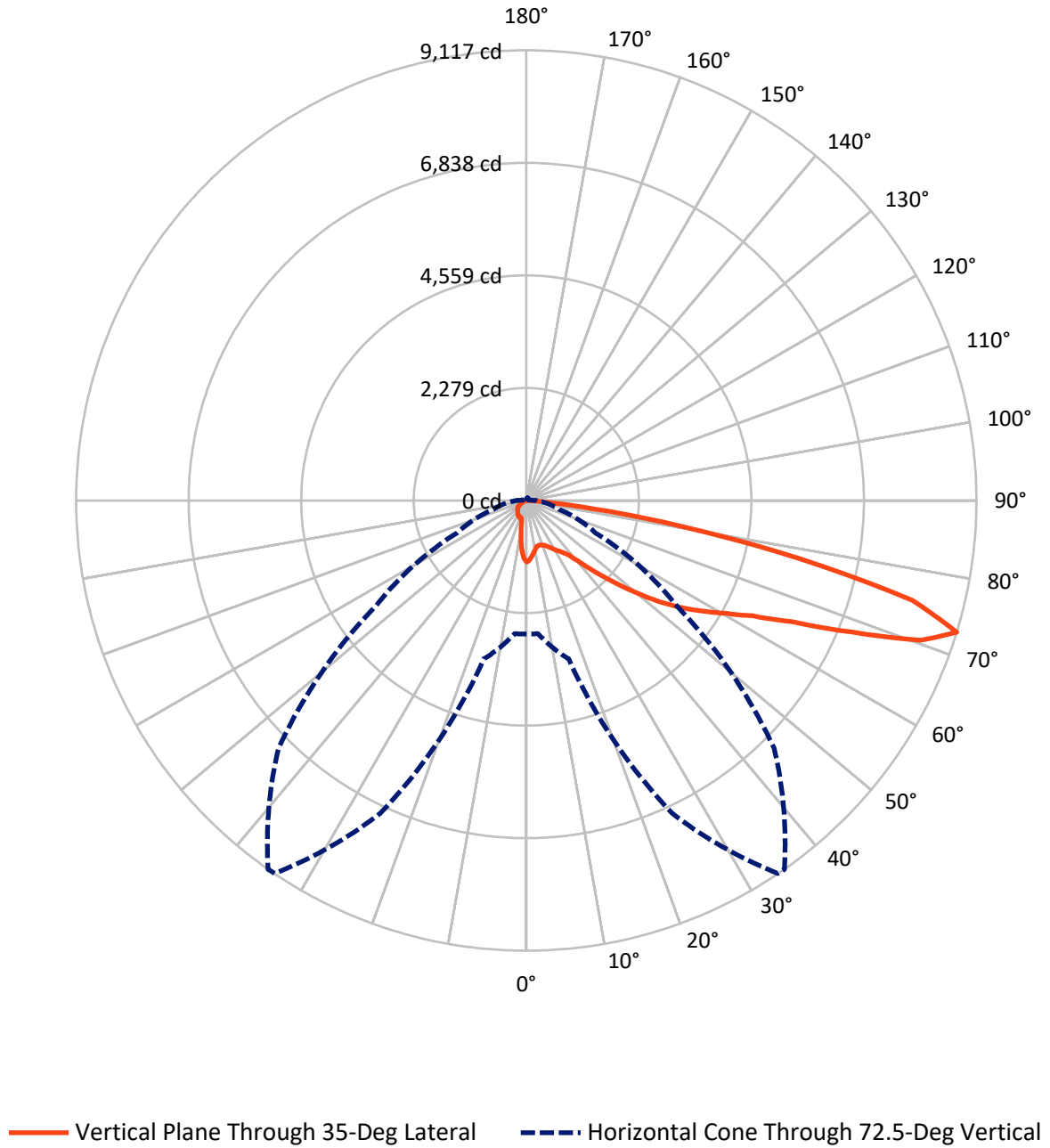
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	967.4	0.0	967.4
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	7628.6	0.0	7628.6
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	8596.0	0.0	8596.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.4	1.2
10°-20°	239.5	2.8
20°-30°	389.1	4.5
30°-40°	649.1	7.6
40°-50°	1228.2	14.3
50°-60°	1951.6	22.7
60°-70°	2414.2	28.1
70°-80°	1500.7	17.5
80°-90°	121.3	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°	8596.0	100.0
0°-180°	8596.0	100.0

**Coefficient of Utilization**



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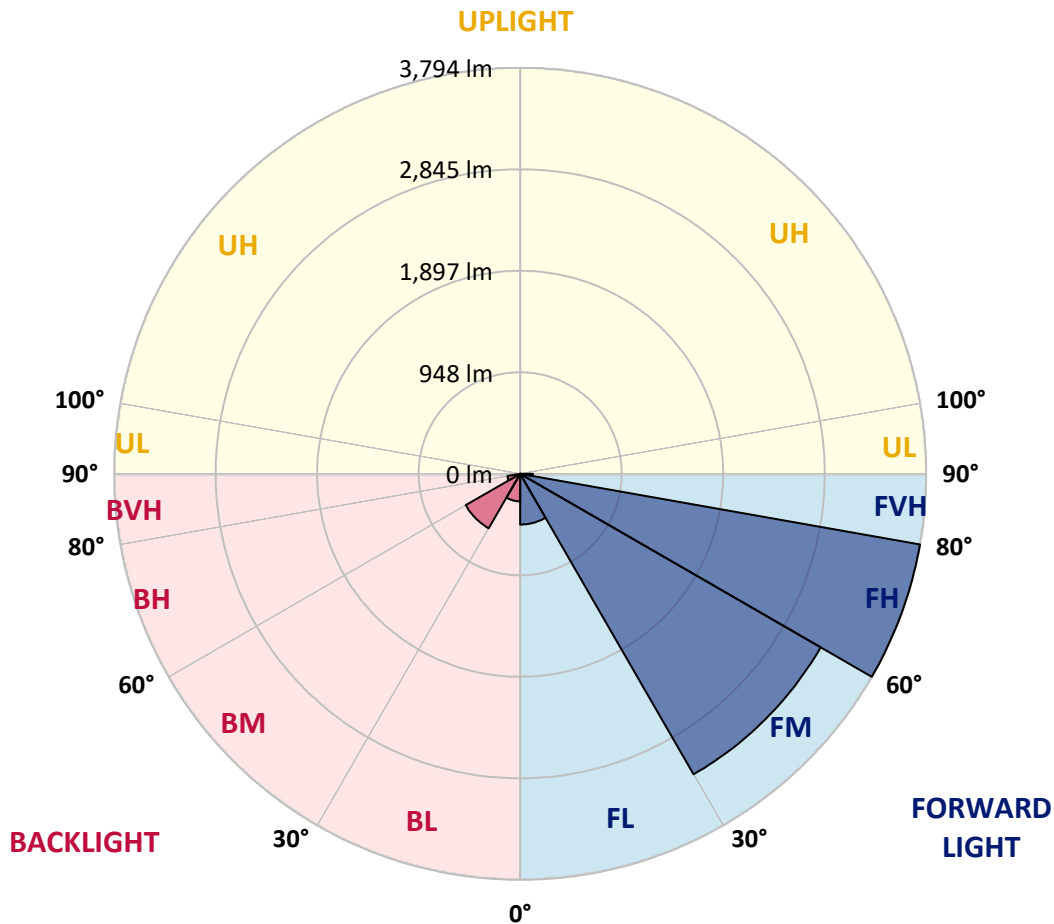
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	473.9	5.5			
FM (30°-60°)	3241.5	37.7			
FH (60°-80°)	3793.5	44.1			G2/5000
FVH (80°-90°)	119.6	1.4			G2/225
BL (0°-30°)	257.1	3.0	B1/500		
BM (30°-60°)	587.3	6.8	B1/1000		
BH (60°-80°)	121.4	1.4	B1/500		G1/500
BVH (80°-90°)	1.7	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°	1245.8	1245.8	1245.8	1245.8	1245.8	1245.8	1245.8	1245.8	1245.8	1245.8	1245.8
2.5°	1190.4	1200.5	1202.4	1205.5	1205.5	1209.3	1215.6	1224.4	1238.9	1246.5	1251.5
5°	1097.2	1104.8	1114.2	1121.8	1136.3	1138.1	1162.7	1186.6	1220.0	1245.2	1262.9
7.5°	1003.4	1012.2	1024.8	1043.0	1061.9	1067.6	1104.8	1145.1	1198.0	1245.2	1274.8
10°	937.2	937.9	949.2	967.5	997.7	1004.6	1050.0	1107.3	1173.4	1237.7	1286.2
12.5°	900.1	904.5	909.5	923.4	952.3	956.7	1005.2	1072.6	1148.9	1233.3	1299.4
15°	900.1	903.2	906.4	913.3	936.6	940.4	983.2	1050.6	1136.3	1235.1	1320.8
17.5°	909.5	914.5	912.0	920.2	944.8	947.3	985.1	1044.3	1135.6	1247.1	1353.6
20°	932.2	936.0	930.9	936.0	960.5	965.6	1004.6	1056.3	1146.3	1267.9	1394.5
22.5°	968.1	970.0	958.0	961.8	987.0	993.3	1038.6	1090.3	1172.2	1301.3	1449.3
25°	1013.4	1017.2	998.9	1003.4	1027.3	1034.8	1087.1	1141.3	1213.1	1347.3	1519.2
27.5°	1065.7	1067.6	1051.9	1051.2	1082.1	1092.8	1145.7	1204.3	1267.9	1405.2	1607.4
30°	1125.5	1131.2	1116.1	1113.6	1152.6	1161.4	1213.7	1281.8	1348.5	1492.1	1732.7
32.5°	1172.8	1177.2	1168.4	1174.7	1214.4	1221.3	1296.2	1391.3	1475.1	1615.6	1903.4
35°	1240.8	1243.3	1223.2	1234.5	1279.9	1297.5	1409.0	1545.0	1634.5	1770.5	2126.4
37.5°	1487.1	1487.1	1401.4	1345.4	1388.8	1404.6	1563.3	1738.4	1831.0	1978.4	2407.3
40°	1827.8	1822.2	1696.8	1582.2	1576.5	1607.4	1783.1	1982.1	2084.8	2227.8	2723.5
42.5°	2191.3	2182.4	2011.7	1898.4	1879.5	1890.2	2036.9	2282.6	2387.1	2532.0	3063.6
45°	2513.7	2511.2	2355.0	2202.6	2168.6	2202.6	2353.8	2634.0	2709.0	2861.4	3403.1
47.5°	2783.9	2783.9	2669.9	2570.4	2552.8	2572.9	2782.7	3023.9	3017.0	3212.2	3733.8
50°	3095.1	3092.6	2984.2	2941.4	2959.7	2988.0	3276.5	3434.6	3335.7	3556.8	4029.2
52.5°	3313.0	3328.1	3291.0	3284.1	3377.3	3426.4	3777.9	3836.4	3621.0	3883.7	4250.2
55°	3485.6	3503.2	3546.1	3594.6	3774.1	3838.3	4263.5	4217.5	3859.7	4167.1	4377.5
57.5°	3730.0	3704.8	3770.9	3866.7	4157.0	4234.5	4734.0	4577.1	4051.8	4397.0	4391.3
60°	4026.6	4030.4	4041.8	4162.7	4539.3	4638.9	5197.5	4917.3	4175.3	4538.1	4237.6
62.5°	4383.1	4388.8	4412.1	4597.9	5052.7	5146.5	5691.3	5195.7	4232.0	4498.4	3840.8
65°	4358.6	4382.5	4642.6	5278.2	5833.1	5925.7	6267.7	5390.9	4146.3	4135.6	3127.2
67.5°	3970.6	4009.6	4444.9	6090.7	7009.6	7112.9	6964.3	5429.3	3776.6	3216.0	2040.1
70°	3461.7	3475.5	3998.9	6821.3	8372.0	8476.6	7587.8	5006.7	2865.8	1793.8	913.9
72.5°	2703.3	2706.5	3320.6	6990.7	9111.4	9117.1	7098.4	3716.8	1541.2	689.1	317.4
75°	1931.1	1912.2	2224.0	5669.3	8016.1	8080.4	5321.6	1743.4	588.9	325.6	158.1
77.5°	1035.5	1056.3	1258.4	3362.2	5537.7	5647.3	2903.6	502.6	299.8	221.7	104.6
80°	320.0	337.6	515.8	1539.4	3136.7	3202.8	1076.4	223.6	209.1	158.1	68.7
82.5°	100.8	104.6	240.6	646.9	1301.9	1332.1	311.8	126.6	143.0	104.6	40.3
85°	29.0	29.6	107.1	241.2	321.9	328.2	87.5	49.1	81.9	64.9	20.8
87.5°	3.1	10.1	40.3	40.3	28.3	27.7	9.4	10.7	23.3	8.2	3.8
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°	1245.8	1245.8	1245.8	1245.8	1245.8	1245.8	1245.8	1245.8	1245.8	1245.8	1245.8
2.5°	1248.4	1249.0	1240.8	1227.0	1211.8	1199.2	1183.5	1170.9	1162.1	1159.6	1164.0
5°	1257.2	1252.8	1229.5	1187.3	1136.9	1093.4	1044.9	1006.5	981.3	970.6	974.4
7.5°	1270.4	1257.8	1206.8	1123.7	1027.3	941.6	854.7	787.3	744.5	723.1	726.2
10°	1281.8	1256.6	1169.0	1031.7	884.3	754.6	637.4	556.2	510.8	489.4	490.0
12.5°	1292.5	1255.9	1119.9	922.7	723.1	564.3	455.4	415.1	402.5	398.1	396.8
15°	1312.6	1257.8	1058.2	798.0	562.5	426.4	386.7	386.1	388.6	387.4	386.7
17.5°	1340.3	1259.7	988.2	665.8	434.0	376.0	374.1	379.8	383.6	381.7	381.1
20°	1376.2	1267.3	913.9	534.7	372.9	363.4	367.8	372.9	376.0	372.9	372.2
22.5°	1426.6	1280.5	832.7	429.6	353.3	355.9	359.6	365.3	368.5	364.1	363.4
25°	1488.3	1301.3	752.7	373.5	343.9	347.0	352.7	359.0	362.8	358.4	357.8
27.5°	1568.3	1334.7	679.0	360.9	334.5	336.3	344.5	354.0	359.0	353.3	353.3
30°	1684.2	1389.5	615.4	366.6	328.8	324.4	335.7	348.9	354.6	349.6	348.9
32.5°	1837.9	1466.9	576.3	375.4	326.3	310.5	321.2	338.2	347.7	344.5	344.5
35°	2039.5	1584.7	561.2	385.5	324.4	296.0	303.6	321.9	338.2	341.4	341.4
37.5°	2283.8	1748.5	565.6	389.9	318.7	284.1	287.8	303.6	325.0	335.1	337.6
40°	2561.6	1939.3	590.8	385.5	312.4	274.0	274.6	286.6	305.5	320.6	325.6
42.5°	2848.2	2162.3	637.4	369.1	306.7	265.2	263.3	271.5	284.1	294.8	299.2
45°	3120.9	2391.6	683.4	346.4	299.8	256.4	251.9	255.1	257.6	262.0	264.5
47.5°	3359.0	2552.8	670.2	325.6	290.4	246.3	238.7	237.5	229.9	229.3	228.6
50°	3523.4	2588.1	595.2	304.8	276.5	234.9	223.0	215.4	202.2	195.9	196.5
52.5°	3575.7	2448.9	486.2	284.1	253.8	219.8	202.8	190.8	174.5	168.8	168.2
55°	3506.4	2176.1	388.6	258.9	222.3	199.7	180.8	165.0	151.8	144.9	144.9
57.5°	3337.0	1829.1	307.4	229.3	189.0	177.0	158.1	142.3	131.0	124.1	122.8
60°	3056.0	1452.4	243.1	194.0	161.2	152.4	132.9	122.8	112.7	104.6	102.7
62.5°	2629.6	1036.7	190.8	153.7	134.8	124.7	113.4	105.8	93.8	82.5	80.6
65°	2052.1	634.3	147.4	112.7	108.3	103.3	96.4	89.4	75.0	63.6	61.7
67.5°	1294.3	300.4	105.2	85.0	85.7	83.1	80.0	74.3	63.6	53.5	52.3
70°	570.0	145.5	69.3	64.9	63.6	63.6	66.1	64.2	54.2	44.7	42.8
72.5°	194.0	78.1	51.6	49.1	46.0	45.3	55.4	53.5	43.5	34.6	32.8
75°	101.4	52.3	37.8	35.3	27.7	33.4	44.1	41.6	30.9	22.7	20.8
77.5°	66.1	37.2	25.8	22.7	15.7	22.0	32.8	29.0	18.3	11.3	10.1
80°	41.6	24.6	15.1	10.7	7.6	12.0	17.6	12.6	6.9	2.5	1.9
82.5°	22.0	12.6	5.7	3.8	3.1	3.8	4.4	3.1	1.3	0.0	0.0
85°	8.8	4.4	1.9	1.3	0.6	0.0	1.3	0.6	0.0	0.0	0.0
87.5°	3.1	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)