

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: P882970

Luminaire Tested: **NAV-SB3A-830-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882970  
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-830-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

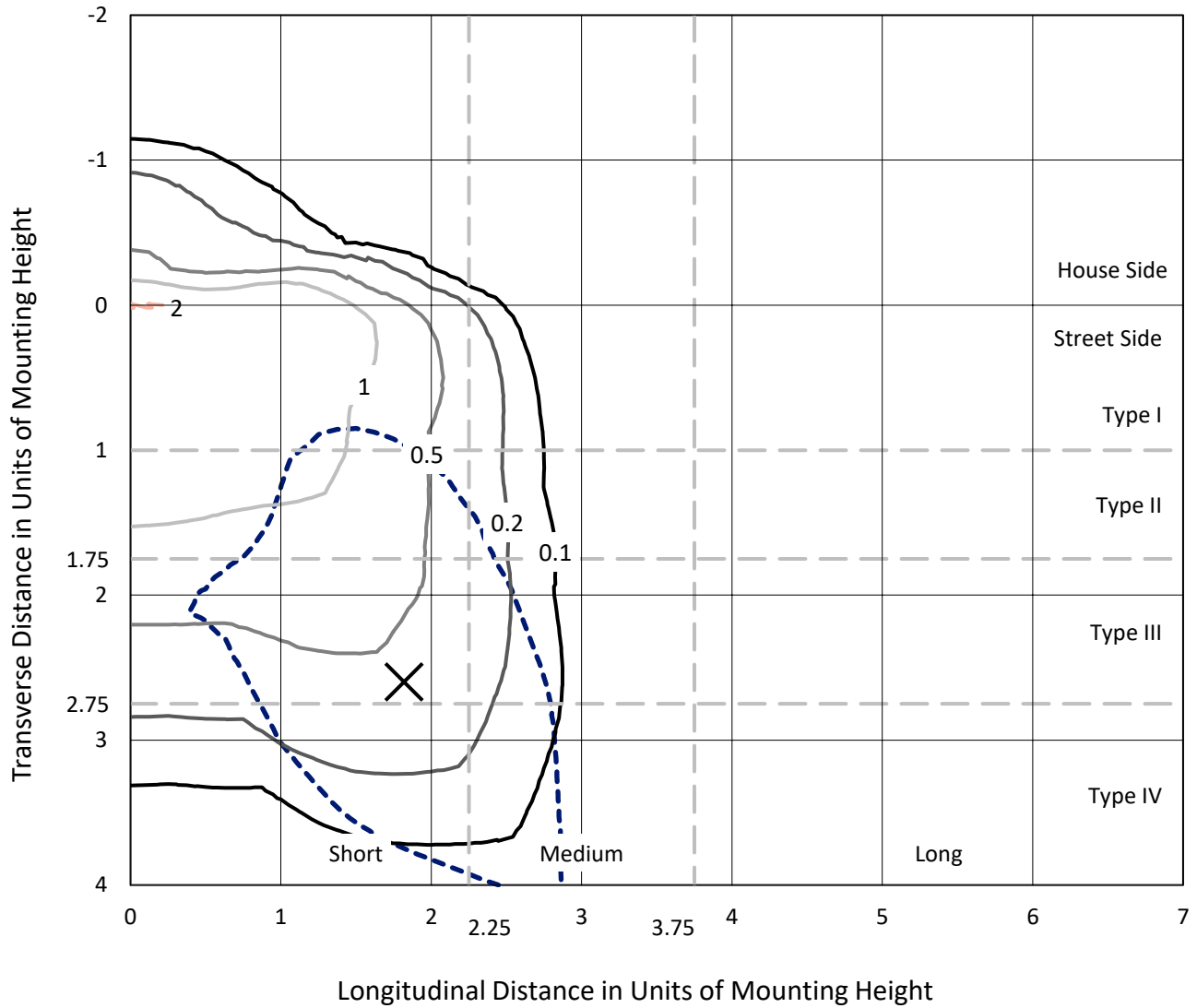
Lumens per Lamp: N/A  
Luminaire Lumens: 8914 lumens  
Efficiency: N/A  
Efficacy: 105.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 84.7  
Input Voltage (V): 120.0  
Input Current (Ain): 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

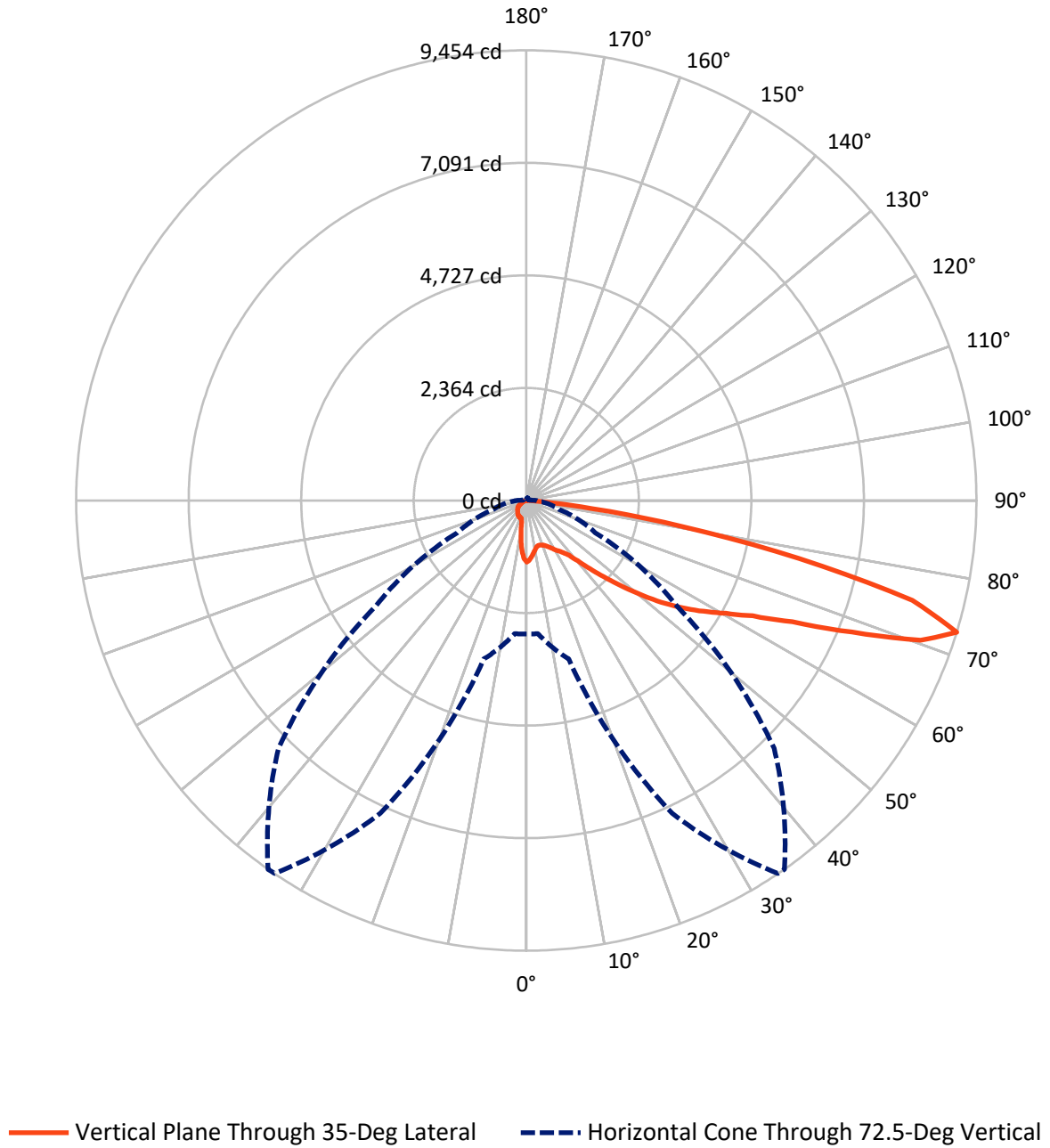
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 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	1003.2	0.0	1003.2
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	7910.8	0.0	7910.8
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	8914.0	0.0	8914.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.2	1.2
10°-20°	248.4	2.8
20°-30°	403.4	4.5
30°-40°	673.1	7.6
40°-50°	1273.6	14.3
50°-60°	2023.8	22.7
60°-70°	2503.5	28.1
70°-80°	1556.2	17.5
80°-90°	125.8	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°	8914.0	100.0
0°-180°	8914.0	100.0

**Coefficient of Utilization**



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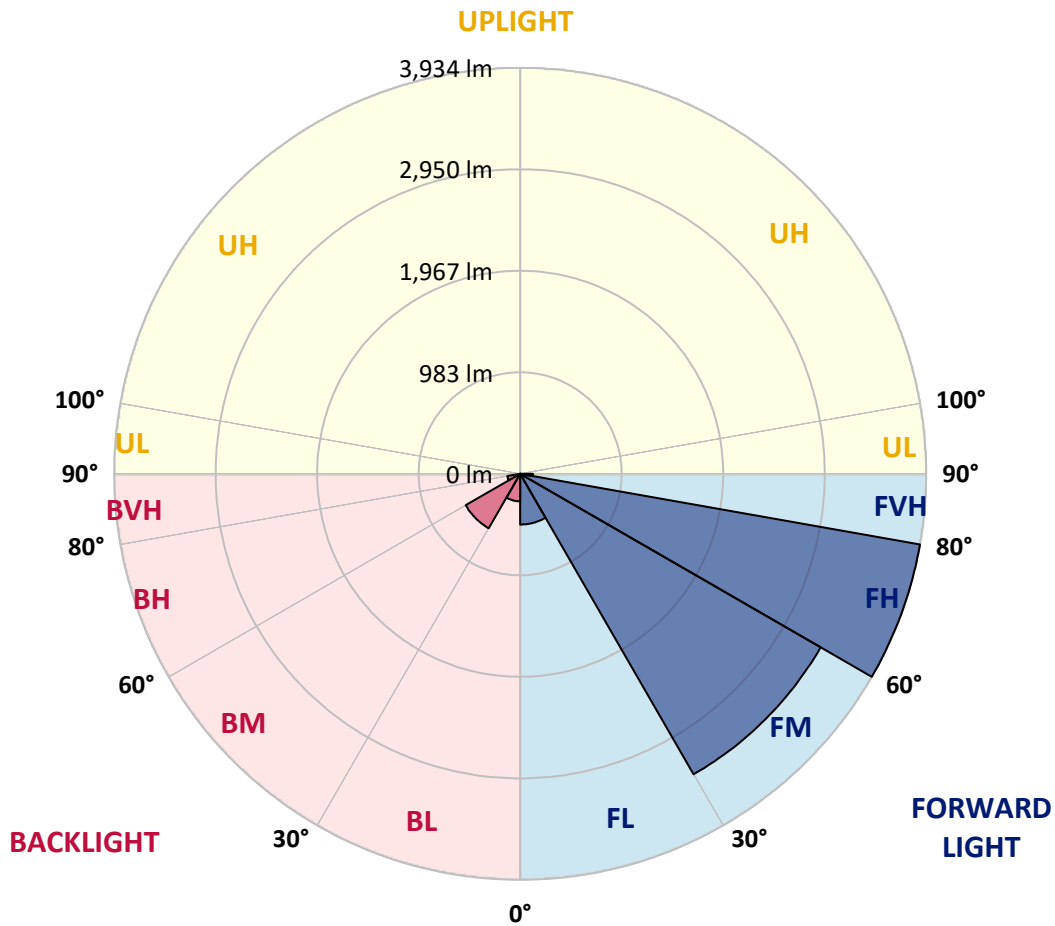
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	491.4	5.5			
FM (30°-60°)	3361.5	37.7			
FH (60°-80°)	3933.9	44.1			G2/5000
FVH (80°-90°)	124.1	1.4			G2/225
BL (0°-30°)	266.6	3.0	B1/500		
BM (30°-60°)	609.0	6.8	B1/1000		
BH (60°-80°)	125.9	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°	1291.9	1291.9	1291.9	1291.9	1291.9	1291.9	1291.9	1291.9	1291.9	1291.9	1291.9
2.5°	1234.5	1244.9	1246.9	1250.1	1250.1	1254.1	1260.6	1269.7	1284.8	1292.6	1297.8
5°	1137.8	1145.6	1155.4	1163.3	1178.3	1180.2	1205.7	1230.5	1265.2	1291.3	1309.6
7.5°	1040.5	1049.6	1062.7	1081.6	1101.2	1107.1	1145.6	1187.4	1242.3	1291.3	1322.0
10°	971.9	972.5	984.3	1003.2	1034.6	1041.8	1088.8	1148.2	1216.8	1283.4	1333.7
12.5°	933.4	937.9	943.2	957.5	987.6	992.1	1042.4	1112.3	1191.4	1278.9	1347.5
15°	933.4	936.6	939.9	947.1	971.2	975.2	1019.6	1089.5	1178.3	1280.8	1369.7
17.5°	943.2	948.4	945.8	954.3	979.7	982.3	1021.5	1082.9	1177.6	1293.2	1403.6
20°	966.7	970.6	965.4	970.6	996.1	1001.3	1041.8	1095.3	1188.7	1314.8	1446.1
22.5°	1003.9	1005.9	993.4	997.4	1023.5	1030.0	1077.0	1130.6	1215.5	1349.4	1502.9
25°	1050.9	1054.8	1035.9	1040.5	1065.3	1073.1	1127.3	1183.5	1258.0	1397.1	1575.4
27.5°	1105.1	1107.1	1090.8	1090.1	1122.1	1133.2	1188.1	1248.8	1314.8	1457.2	1666.8
30°	1167.2	1173.1	1157.4	1154.8	1195.3	1204.4	1258.6	1329.2	1398.4	1547.3	1796.8
32.5°	1216.2	1220.7	1211.6	1218.1	1259.3	1266.5	1344.2	1442.8	1529.7	1675.3	1973.8
35°	1286.7	1289.3	1268.4	1280.2	1327.2	1345.5	1461.1	1602.2	1694.9	1836.0	2205.0
37.5°	1542.1	1542.1	1453.3	1395.1	1440.2	1456.5	1621.1	1802.7	1898.7	2051.6	2496.4
40°	1895.5	1889.6	1759.6	1640.7	1634.8	1666.8	1849.1	2055.5	2161.9	2310.2	2824.2
42.5°	2272.3	2263.2	2086.2	1968.6	1949.0	1960.1	2112.3	2367.0	2475.5	2625.7	3176.9
45°	2606.7	2604.1	2442.1	2284.1	2248.8	2284.1	2440.8	2731.5	2809.2	2967.3	3529.0
47.5°	2886.9	2886.9	2768.7	2665.5	2647.2	2668.1	2885.6	3135.8	3128.6	3331.1	3871.9
50°	3209.6	3207.0	3094.6	3050.2	3069.2	3098.6	3397.7	3561.6	3459.1	3688.4	4178.2
52.5°	3435.6	3451.3	3412.7	3405.5	3502.2	3553.2	3917.6	3978.4	3755.0	4027.3	4407.5
55°	3614.6	3632.8	3677.3	3727.5	3913.7	3980.3	4421.2	4373.5	4002.5	4321.3	4539.4
57.5°	3868.0	3841.8	3910.4	4009.7	4310.8	4391.2	4909.1	4746.5	4201.7	4559.7	4553.8
60°	4175.6	4179.5	4191.3	4316.7	4707.3	4810.5	5389.8	5099.2	4329.8	4706.0	4394.4
62.5°	4545.3	4551.2	4575.3	4768.0	5239.6	5336.9	5901.9	5387.9	4388.5	4664.8	3982.9
65°	4519.8	4544.6	4814.4	5473.4	6048.9	6144.9	6499.5	5590.3	4299.7	4288.6	3242.9
67.5°	4117.5	4158.0	4609.3	6316.0	7268.9	7376.1	7221.9	5630.2	3916.3	3335.0	2115.6
70°	3589.7	3604.1	4146.9	7073.7	8681.7	8790.1	7868.5	5191.9	2971.8	1860.2	947.7
72.5°	2803.3	2806.6	3443.4	7249.3	9448.5	9454.4	7361.0	3854.3	1598.3	714.5	329.2
75°	2002.6	1983.0	2306.3	5879.0	8312.7	8379.3	5518.5	1807.9	610.7	337.7	163.9
77.5°	1073.8	1095.3	1305.0	3486.5	5742.5	5856.2	3011.0	521.2	310.9	229.9	108.4
80°	331.8	350.1	534.9	1596.3	3252.7	3321.3	1116.2	231.9	216.8	163.9	71.2
82.5°	104.5	108.4	249.5	670.8	1350.1	1381.4	323.3	131.3	148.3	108.4	41.8
85°	30.0	30.7	111.0	250.2	333.8	340.3	90.8	50.9	84.9	67.3	21.6
87.5°	3.3	10.5	41.8	41.8	29.4	28.7	9.8	11.1	24.2	8.5	3.9
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°	1291.9	1291.9	1291.9	1291.9	1291.9	1291.9	1291.9	1291.9	1291.9	1291.9	1291.9
2.5°	1294.6	1295.2	1286.7	1272.3	1256.7	1243.6	1227.3	1214.2	1205.1	1202.5	1207.0
5°	1303.7	1299.1	1275.0	1231.2	1178.9	1133.9	1083.6	1043.7	1017.6	1006.5	1010.4
7.5°	1317.4	1304.3	1251.4	1165.2	1065.3	976.5	886.3	816.4	772.0	749.8	753.1
10°	1329.2	1303.0	1212.3	1069.9	917.0	782.5	661.0	576.7	529.7	507.5	508.2
12.5°	1340.3	1302.4	1161.3	956.9	749.8	585.2	472.2	430.4	417.4	412.8	411.5
15°	1361.2	1304.3	1097.3	827.5	583.3	442.2	401.0	400.4	403.0	401.7	401.0
17.5°	1389.9	1306.3	1024.8	690.4	450.0	389.9	388.0	393.9	397.8	395.8	395.2
20°	1427.1	1314.1	947.7	554.5	386.7	376.9	381.4	386.7	389.9	386.7	386.0
22.5°	1479.4	1327.9	863.5	445.5	366.4	369.0	373.0	378.8	382.1	377.5	376.9
25°	1543.4	1349.4	780.5	387.3	356.6	359.9	365.8	372.3	376.2	371.6	371.0
27.5°	1626.4	1384.0	704.1	374.3	346.8	348.8	357.3	367.1	372.3	366.4	366.4
30°	1746.5	1440.9	638.1	380.1	340.9	336.4	348.1	361.8	367.7	362.5	361.8
32.5°	1905.9	1521.2	597.6	389.3	338.3	322.0	333.1	350.7	360.5	357.3	357.3
35°	2114.9	1643.3	582.0	399.7	336.4	307.0	314.8	333.8	350.7	354.0	354.0
37.5°	2368.3	1813.2	586.5	404.3	330.5	294.6	298.5	314.8	337.0	347.5	350.1
40°	2656.4	2011.1	612.7	399.7	324.0	284.1	284.8	297.2	316.8	332.5	337.7
42.5°	2953.6	2242.3	661.0	382.7	318.1	275.0	273.0	281.5	294.6	305.7	310.2
45°	3236.4	2480.0	708.7	359.2	310.9	265.8	261.3	264.5	267.1	271.7	274.3
47.5°	3483.3	2647.2	695.0	337.7	301.1	255.4	247.5	246.2	238.4	237.7	237.1
50°	3653.7	2683.8	617.2	316.1	286.7	243.6	231.2	223.4	209.7	203.1	203.8
52.5°	3708.0	2539.5	504.2	294.6	263.2	228.0	210.3	197.9	180.9	175.0	174.4
55°	3636.1	2256.6	403.0	268.4	230.6	207.0	187.5	171.1	157.4	150.2	150.2
57.5°	3460.4	1896.8	318.7	237.7	195.9	183.5	163.9	147.6	135.9	128.7	127.4
60°	3169.1	1506.2	252.1	201.2	167.2	158.1	137.8	127.4	116.9	108.4	106.5
62.5°	2726.9	1075.1	197.9	159.4	139.8	129.3	117.6	109.7	97.3	85.6	83.6
65°	2128.0	657.7	152.8	116.9	112.3	107.1	99.9	92.7	77.7	66.0	64.0
67.5°	1342.2	311.6	109.1	88.2	88.8	86.2	83.0	77.1	66.0	55.5	54.2
70°	591.1	150.9	71.8	67.3	66.0	66.0	68.6	66.6	56.2	46.4	44.4
72.5°	201.2	81.0	53.6	50.9	47.7	47.0	57.5	55.5	45.1	35.9	34.0
75°	105.2	54.2	39.2	36.6	28.7	34.6	45.7	43.1	32.0	23.5	21.6
77.5°	68.6	38.5	26.8	23.5	16.3	22.9	34.0	30.0	18.9	11.8	10.5
80°	43.1	25.5	15.7	11.1	7.8	12.4	18.3	13.1	7.2	2.6	2.0
82.5°	22.9	13.1	5.9	3.9	3.3	3.9	4.6	3.3	1.3	0.0	0.0
85°	9.1	4.6	2.0	1.3	0.7	0.0	1.3	0.7	0.0	0.0	0.0
87.5°	3.3	0.7	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)