

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: P882408

Luminaire Tested: **NAV-SB2B-735-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882408
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9001 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

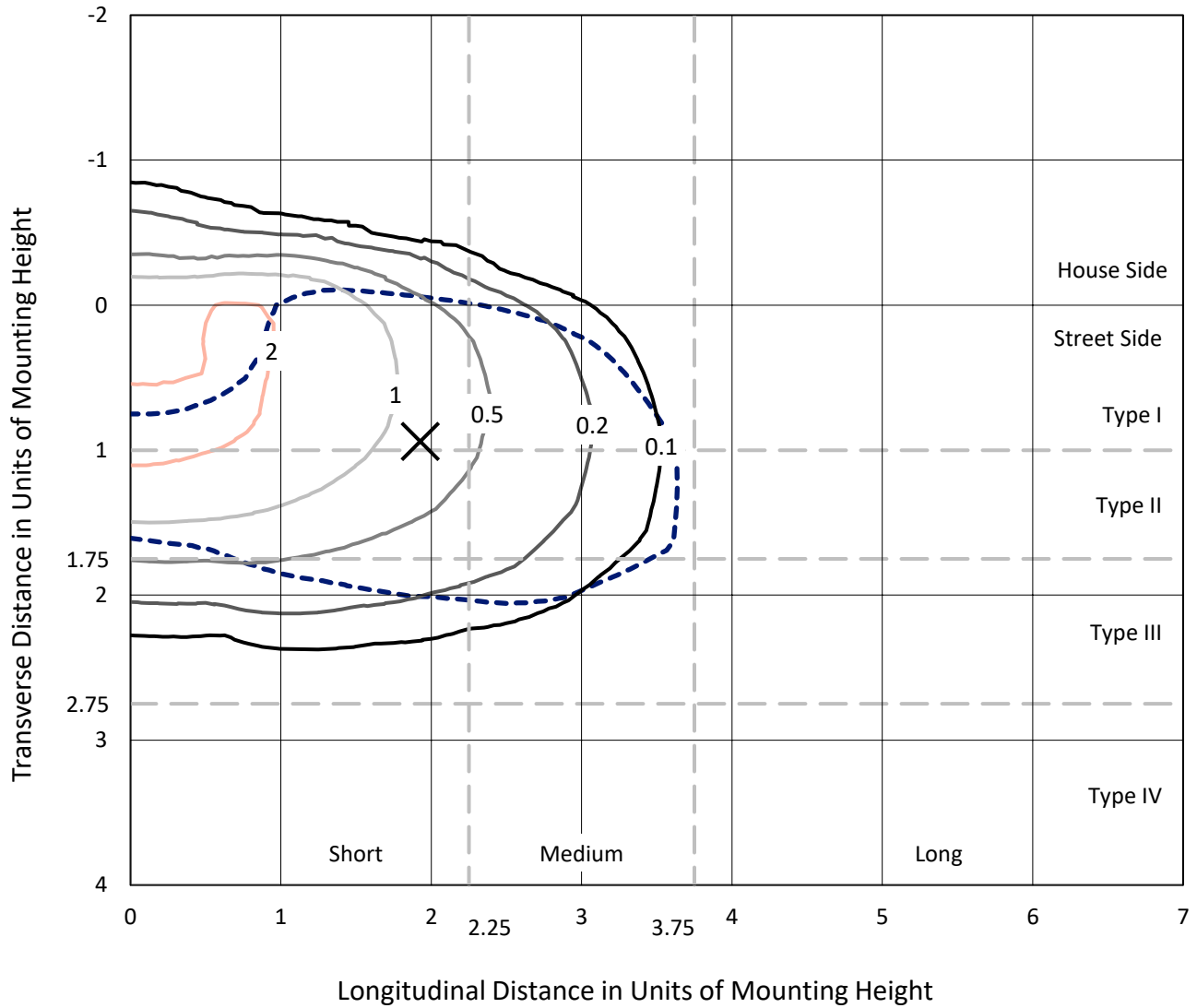
Input Watts (W): 73.9
Input Voltage (V): 120.0
Input Current (Ain): 0.627
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

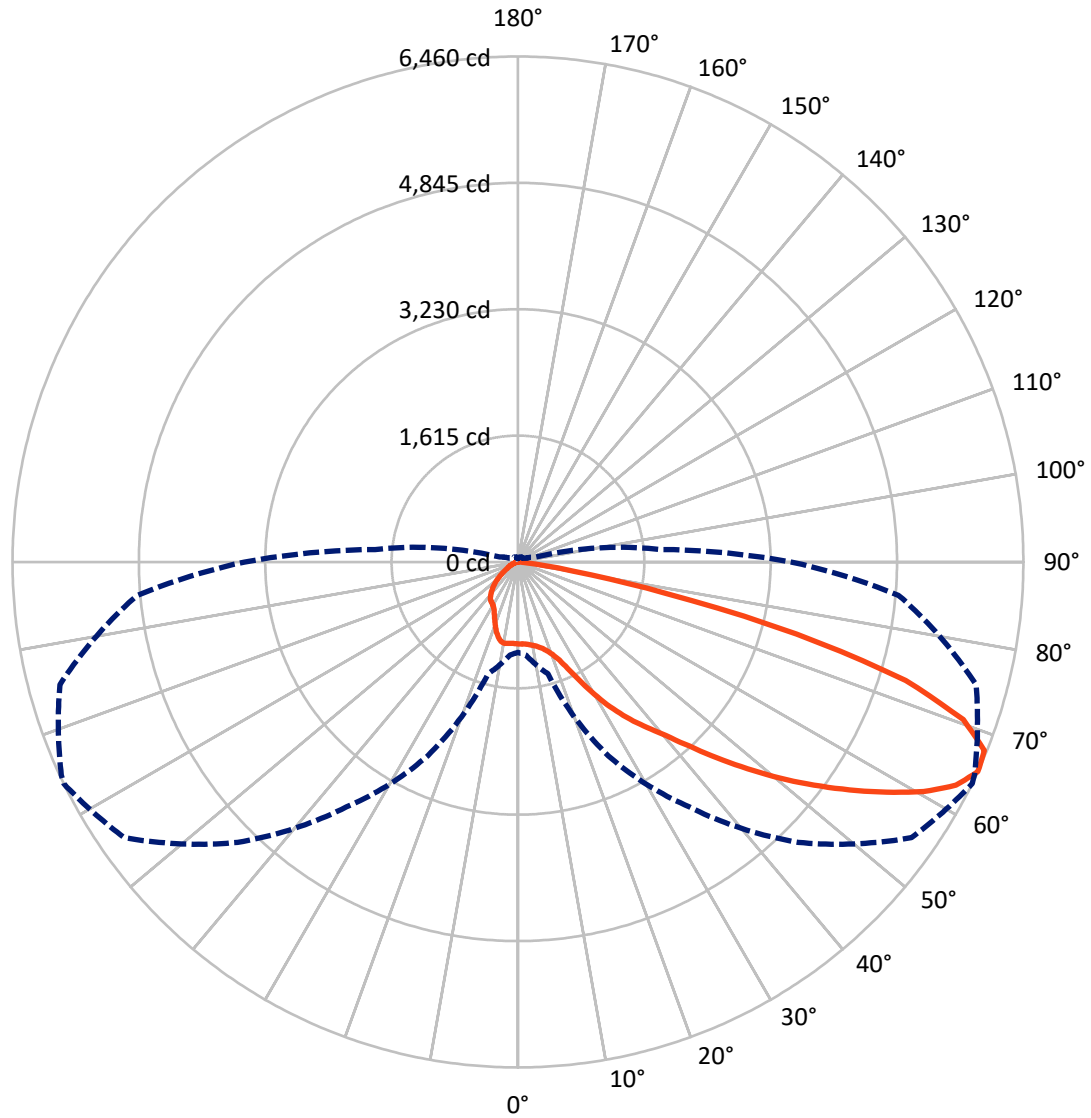
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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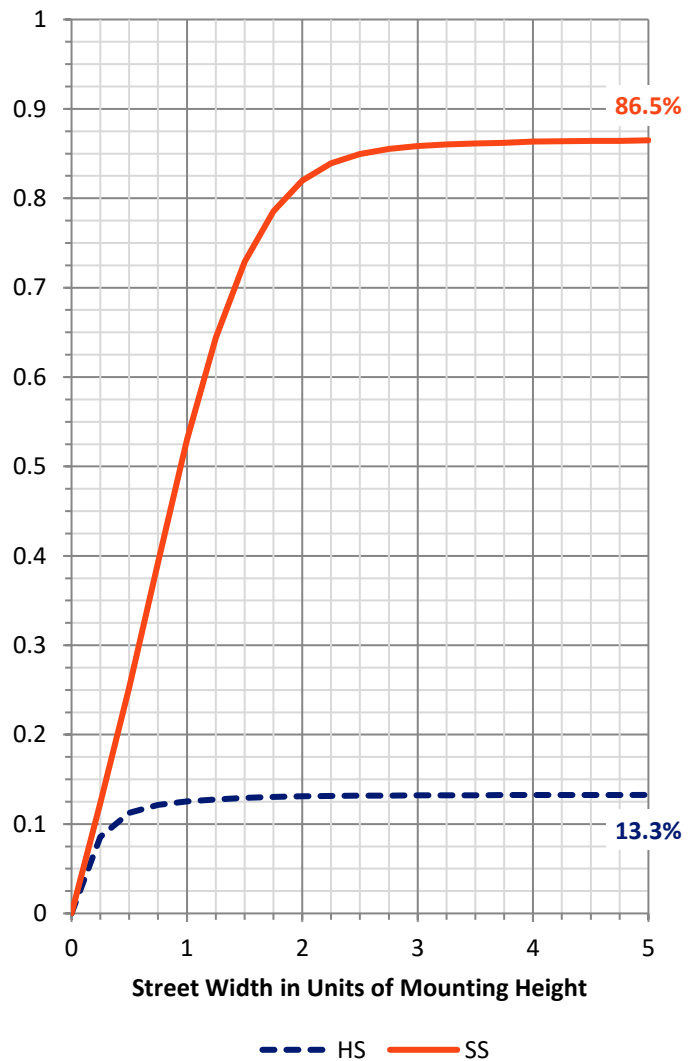
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1203.7	0.0	1203.7
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	7797.3	0.0	7797.3
	% Fixture	86.6	0.0	86.6
Total	Lumens	9001.0	0.0	9001.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.6	1.1
10°-20°	262.0	2.9
20°-30°	496.4	5.5
30°-40°	1004.5	11.2
40°-50°	1711.2	19.0
50°-60°	2327.1	25.9
60°-70°	2185.3	24.3
70°-80°	875.5	9.7
80°-90°	42.4	0.5
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°	9001.0	100.0
0°-180°	9001.0	100.0

Coefficient of Utilization



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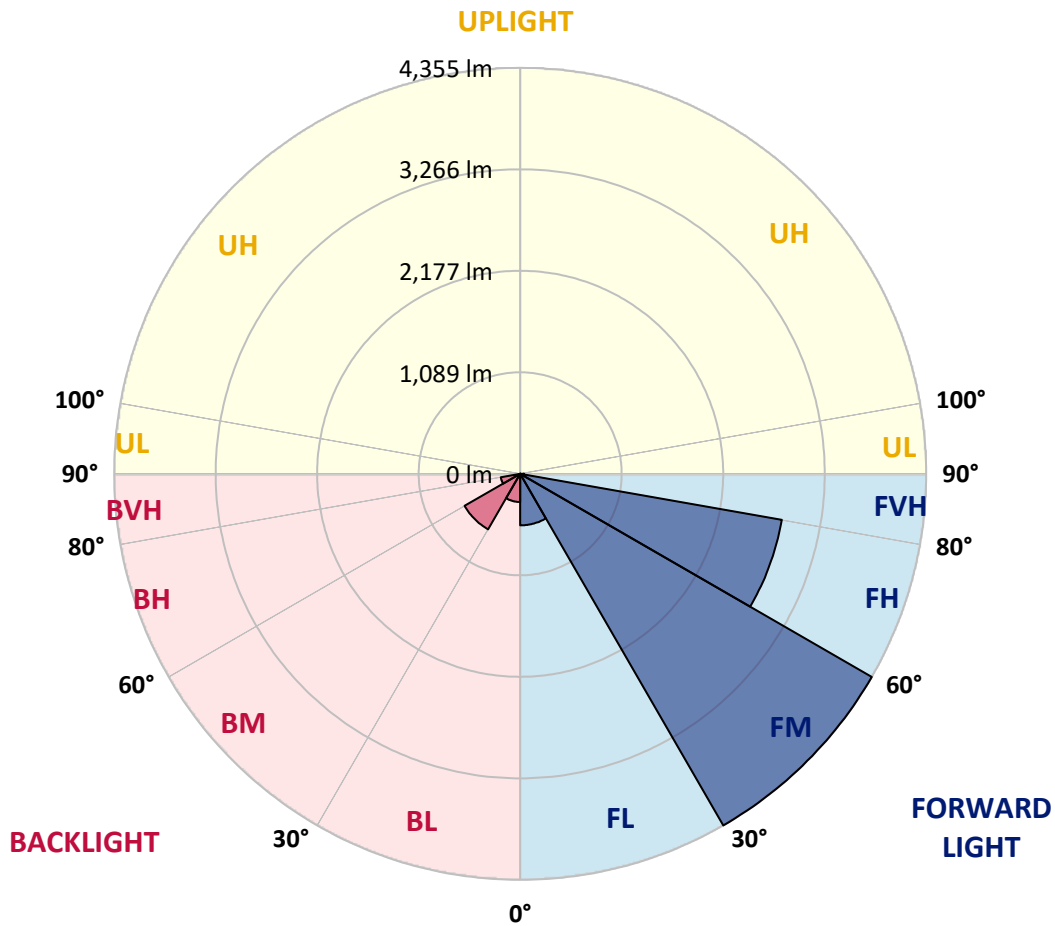
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	552.8	6.1			
FM (30°-60°)	4354.7	48.4			
FH (60°-80°)	2849.5	31.7			G2/5000
FVH (80°-90°)	40.3	0.4			G1/100
BL (0°-30°)	302.2	3.4	B1/500		
BM (30°-60°)	688.1	7.6	B1/1000		
BH (60°-80°)	211.3	2.3	B1/500		G1/500
BVH (80°-90°)	2.1	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1046.9	1046.9	1046.9	1046.9	1046.9	1046.9	1046.9	1046.9	1046.9	1046.9	1046.9
2.5°	1043.3	1050.5	1048.7	1046.9	1046.3	1047.5	1048.1	1047.5	1047.5	1047.5	1048.1
5°	1023.4	1029.4	1029.4	1033.6	1039.7	1046.9	1052.3	1053.5	1054.8	1056.6	1056.0
7.5°	985.4	990.2	993.8	1007.7	1022.8	1042.1	1058.4	1066.8	1068.0	1074.7	1077.1
10°	959.4	965.4	971.5	986.0	1007.7	1036.7	1064.4	1084.9	1087.9	1103.6	1110.9
12.5°	958.2	964.2	972.1	987.8	1013.1	1043.9	1077.7	1107.3	1112.7	1135.6	1150.7
15°	970.9	978.1	985.4	1004.7	1031.8	1069.2	1105.4	1142.2	1147.7	1180.3	1196.6
17.5°	996.8	1006.5	1011.9	1031.2	1060.2	1101.8	1149.5	1191.7	1196.6	1234.6	1255.1
20°	1048.1	1059.6	1061.4	1077.1	1105.4	1150.1	1206.8	1259.3	1265.3	1308.8	1331.7
22.5°	1154.3	1170.6	1156.1	1164.0	1189.3	1234.0	1295.5	1361.9	1370.3	1419.8	1440.3
25°	1341.4	1364.3	1326.9	1313.6	1324.5	1370.9	1448.2	1532.0	1541.7	1581.5	1591.8
27.5°	1708.8	1679.3	1622.6	1567.0	1534.5	1561.0	1647.9	1751.7	1763.8	1802.4	1790.3
30°	2112.5	2086.6	2009.9	1886.9	1809.6	1805.4	1885.6	2001.5	2015.4	2052.2	2015.4
32.5°	2516.8	2492.1	2408.8	2257.3	2123.4	2057.0	2112.5	2241.1	2248.3	2271.8	2217.5
35°	2914.5	2889.1	2805.8	2650.8	2486.0	2335.2	2324.3	2469.1	2471.6	2496.3	2415.4
37.5°	3314.5	3293.4	3204.7	3052.6	2890.3	2682.1	2581.4	2685.2	2688.2	2712.3	2628.4
40°	3599.9	3609.0	3548.0	3430.4	3291.0	3063.5	2869.8	2915.1	2897.0	2937.4	2887.3
42.5°	3844.9	3863.0	3809.9	3750.8	3669.9	3469.6	3227.0	3219.2	3190.2	3211.9	3160.0
45°	4056.7	4071.8	4024.1	4010.2	4008.4	3867.8	3617.4	3570.4	3529.9	3525.7	3463.6
47.5°	4134.5	4163.5	4184.0	4230.5	4321.0	4261.9	4021.1	3948.1	3902.8	3869.6	3771.3
50°	4164.1	4194.9	4264.9	4400.0	4614.2	4639.6	4423.0	4340.9	4285.4	4225.1	4080.2
52.5°	4124.3	4179.2	4273.3	4500.8	4811.6	4942.5	4808.5	4736.7	4673.4	4575.0	4360.2
55°	3889.6	3944.5	4137.0	4499.6	4909.9	5154.9	5173.0	5141.0	5069.8	4914.7	4586.5
57.5°	3394.8	3476.2	3780.9	4346.3	4908.1	5337.7	5530.2	5553.1	5473.5	5251.4	4764.5
60°	2709.3	2819.7	3191.4	4006.6	4756.7	5436.7	5843.4	5958.0	5873.6	5583.3	4908.7
62.5°	1890.5	2018.4	2370.2	3474.4	4410.3	5365.5	6072.1	6283.9	6219.9	5880.2	4964.2
65°	1153.1	1194.1	1477.7	2734.0	3821.4	5067.4	6142.7	6460.1	6438.9	6061.8	4882.2
67.5°	768.1	802.5	884.0	1874.8	2966.3	4471.8	5973.7	6429.3	6435.3	6032.3	4581.7
70°	462.8	492.4	545.5	1090.4	1922.5	3539.6	5450.6	6037.1	6072.1	5637.0	4012.0
72.5°	190.7	210.6	258.9	494.2	995.6	2246.5	4340.3	5183.3	5264.7	4739.8	3079.2
75°	108.0	118.3	152.1	248.0	432.0	1046.9	2629.0	3679.6	3799.6	3266.8	1852.5
77.5°	71.8	76.6	98.4	160.5	243.2	357.2	1123.5	1917.0	2146.3	1784.3	801.9
80°	48.3	52.5	67.6	107.4	158.1	153.3	357.8	710.2	873.7	613.1	195.5
82.5°	32.6	33.2	48.3	70.6	100.2	74.2	105.6	220.8	277.6	177.4	74.2
85°	18.7	18.1	35.6	41.0	44.7	30.8	32.0	66.4	86.9	74.8	42.2
87.5°	2.4	3.6	13.9	10.9	6.0	6.6	6.6	11.5	16.9	18.1	9.1
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1046.9	1046.9	1046.9	1046.9	1046.9	1046.9	1046.9	1046.9	1046.9	1046.9	1046.9
2.5°	1048.1	1047.5	1045.7	1043.9	1039.7	1037.3	1038.5	1037.3	1036.7	1037.3	1039.7
5°	1056.0	1054.2	1049.3	1043.3	1034.8	1024.6	1017.9	1008.3	999.2	993.8	995.0
7.5°	1077.1	1075.3	1068.6	1051.7	1024.6	981.7	942.5	908.1	882.2	867.1	867.7
10°	1110.9	1107.9	1097.6	1060.2	989.0	895.5	817.6	753.1	710.8	690.9	689.1
12.5°	1150.7	1147.1	1129.0	1052.3	921.4	775.4	668.0	596.2	556.9	539.4	537.6
15°	1197.8	1192.9	1157.3	1014.9	823.0	642.6	544.3	490.6	465.2	449.5	450.1
17.5°	1256.3	1247.8	1178.5	958.8	716.2	541.3	468.2	427.8	405.5	390.4	389.2
20°	1332.3	1318.4	1195.3	891.8	617.9	477.3	417.0	383.2	366.3	353.0	350.6
22.5°	1438.5	1418.6	1215.9	819.4	548.5	433.2	378.9	354.2	340.3	325.2	322.8
25°	1570.1	1546.5	1241.2	752.4	500.8	395.2	351.2	330.7	314.4	296.9	295.1
27.5°	1754.1	1711.9	1271.4	697.5	459.8	362.6	325.8	302.9	284.2	269.7	266.7
30°	1959.3	1889.9	1297.9	664.4	422.4	332.5	292.7	269.7	252.2	242.0	240.2
32.5°	2153.6	2059.4	1315.4	649.9	388.6	298.1	256.4	231.7	218.4	215.4	217.2
35°	2337.0	2212.7	1313.6	636.0	358.4	263.7	220.8	195.5	185.2	187.1	187.1
37.5°	2548.2	2376.2	1300.9	614.3	333.7	232.3	190.1	167.7	158.7	159.3	161.7
40°	2793.8	2565.1	1293.1	573.2	306.5	203.3	164.7	146.6	140.0	137.6	137.0
42.5°	3055.6	2747.9	1294.3	526.8	272.7	177.4	147.2	132.1	126.1	124.3	123.7
45°	3318.7	2922.3	1296.1	478.5	237.1	157.5	134.6	121.9	118.3	115.9	115.9
47.5°	3566.1	3070.7	1262.3	426.6	202.1	142.4	124.3	115.9	112.8	109.8	109.8
50°	3796.6	3169.7	1180.9	366.3	174.4	130.3	116.5	110.4	107.4	104.4	104.4
52.5°	3975.8	3185.4	1046.3	304.1	155.1	121.3	111.6	106.2	102.6	99.6	99.0
55°	4055.5	3087.0	855.0	246.2	140.0	113.4	106.8	101.4	97.1	94.1	93.5
57.5°	4035.0	2880.1	666.8	197.9	125.5	105.6	100.8	97.1	92.3	87.5	86.9
60°	3934.2	2603.1	502.6	164.7	112.2	97.1	94.1	91.1	84.5	77.2	76.0
62.5°	3759.8	2254.9	358.4	136.4	97.8	87.5	86.3	83.9	74.2	60.9	59.7
65°	3493.1	1831.9	241.4	113.4	83.9	76.6	77.2	73.0	60.3	45.3	44.0
67.5°	3103.3	1339.6	154.5	92.9	70.0	64.0	64.6	62.2	51.3	38.6	36.8
70°	2606.7	887.0	100.8	70.6	56.1	49.5	53.1	53.7	43.4	31.4	30.2
72.5°	1911.0	523.8	70.6	52.5	41.0	34.4	43.4	44.7	35.0	23.5	22.3
75°	1089.1	248.6	53.1	38.0	25.3	24.1	33.8	33.8	24.1	15.7	14.5
77.5°	457.4	103.8	37.4	24.7	14.5	13.9	22.9	21.1	12.1	7.2	7.2
80°	132.1	46.5	19.9	12.1	6.0	5.4	9.1	6.6	3.0	1.2	1.2
82.5°	51.9	20.5	7.8	4.8	2.4	2.4	1.2	0.0	0.0	0.0	0.0
85°	30.8	8.4	3.6	1.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.8	1.8	1.2	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)