

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: P881556

Luminaire Tested: **NAV-SB1A-735-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881556
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH
HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3278 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

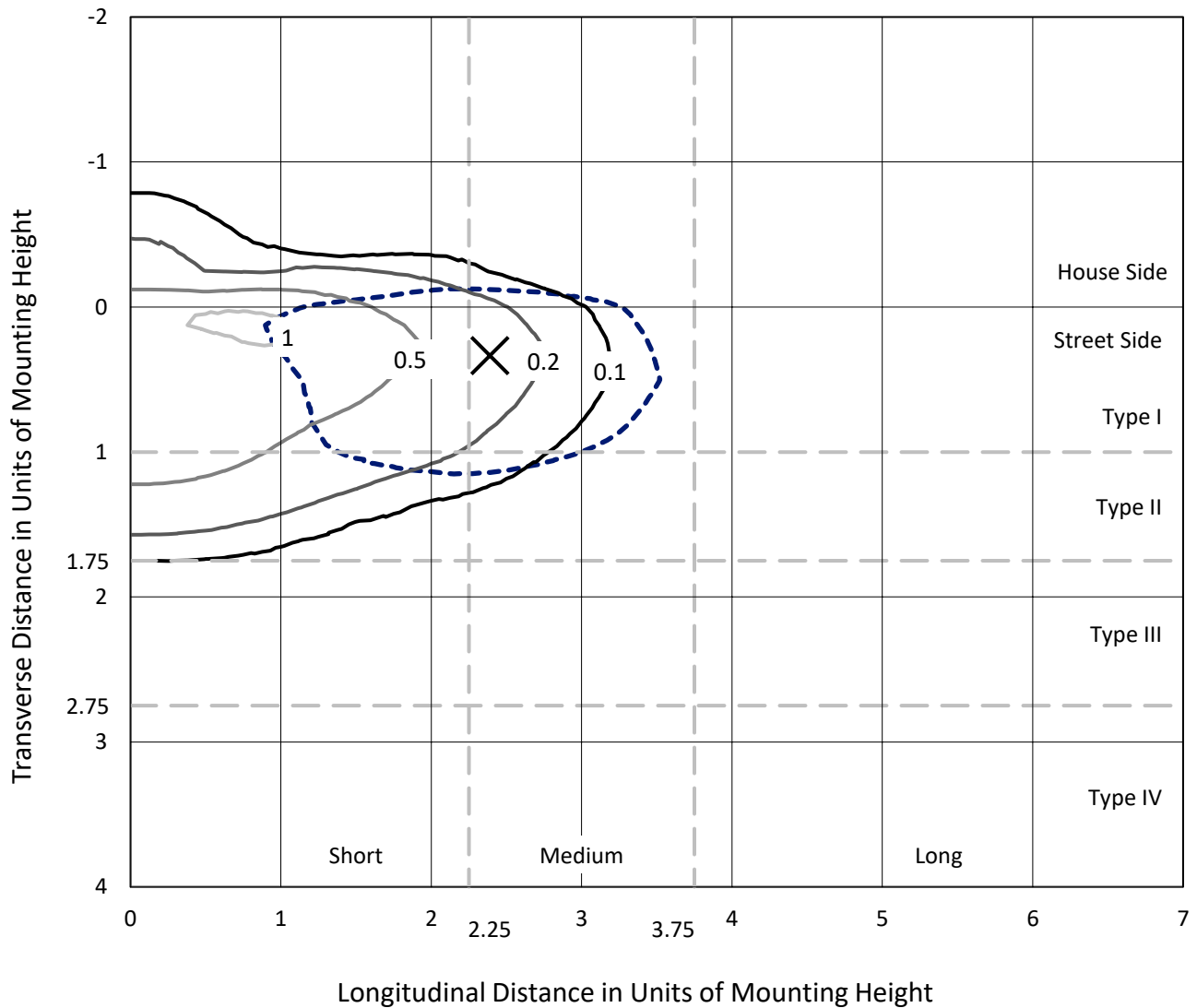
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

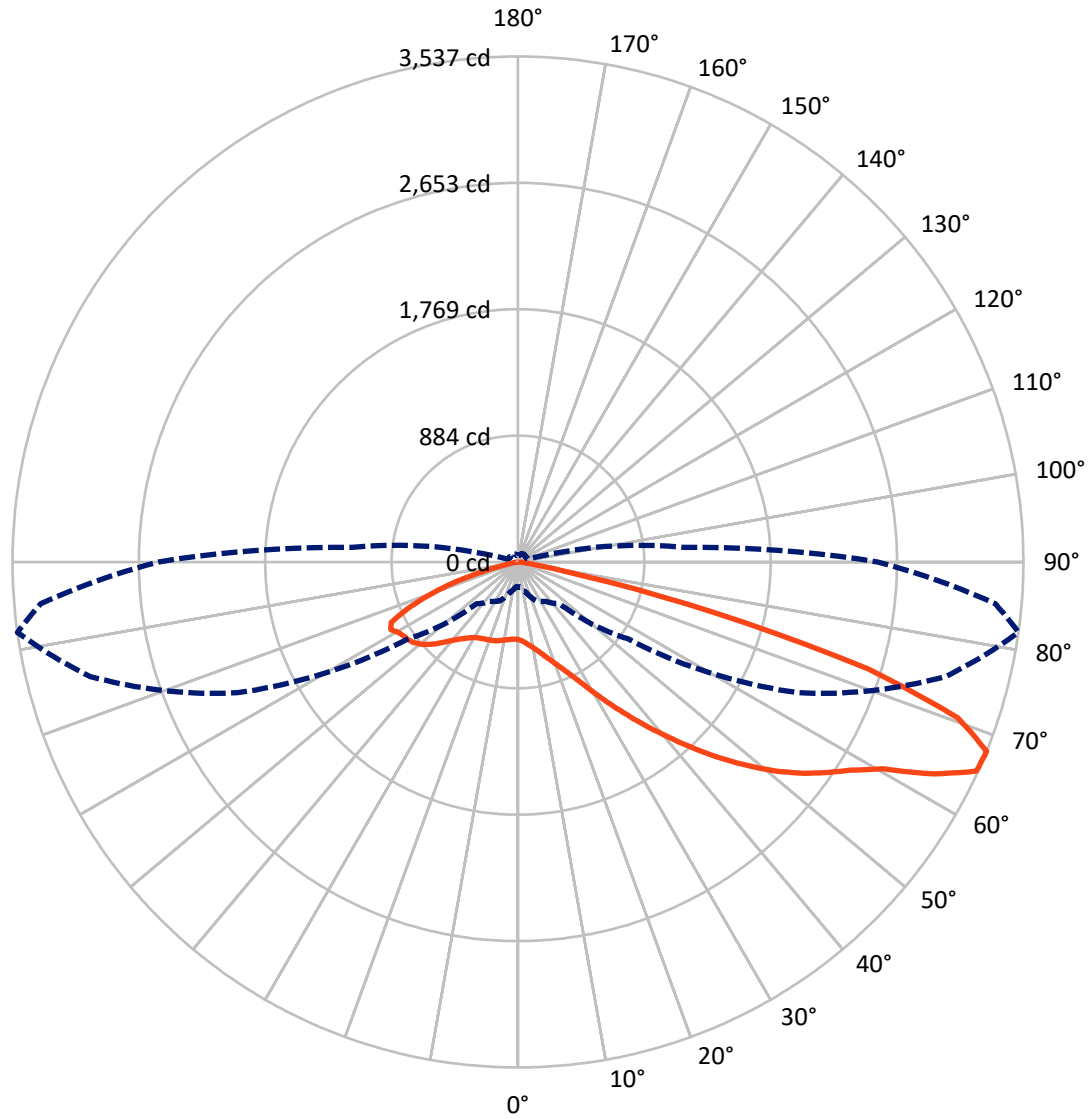
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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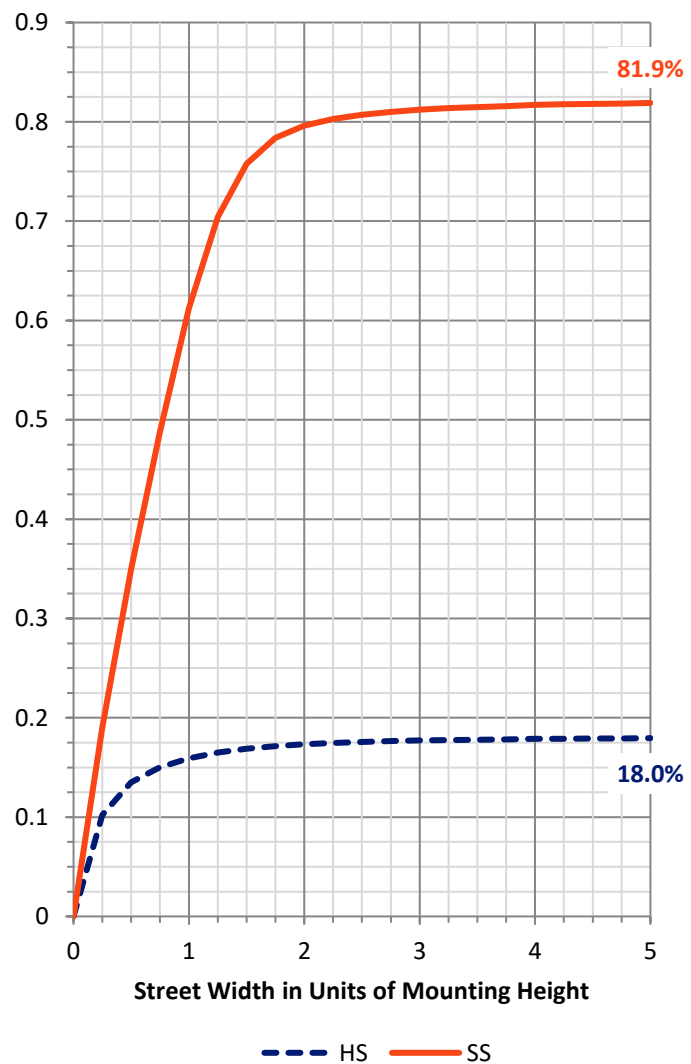
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	593.8	0.0	593.8
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	2684.2	0.0	2684.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	3278.0	0.0	3278.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.4	1.5
10°-20°	125.7	3.8
20°-30°	201.4	6.1
30°-40°	356.1	10.9
40°-50°	623.9	19.0
50°-60°	832.1	25.4
60°-70°	774.6	23.6
70°-80°	297.3	9.1
80°-90°	18.5	0.6
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°	3278.0	100.0
0°-180°	3278.0	100.0

Coefficient of Utilization



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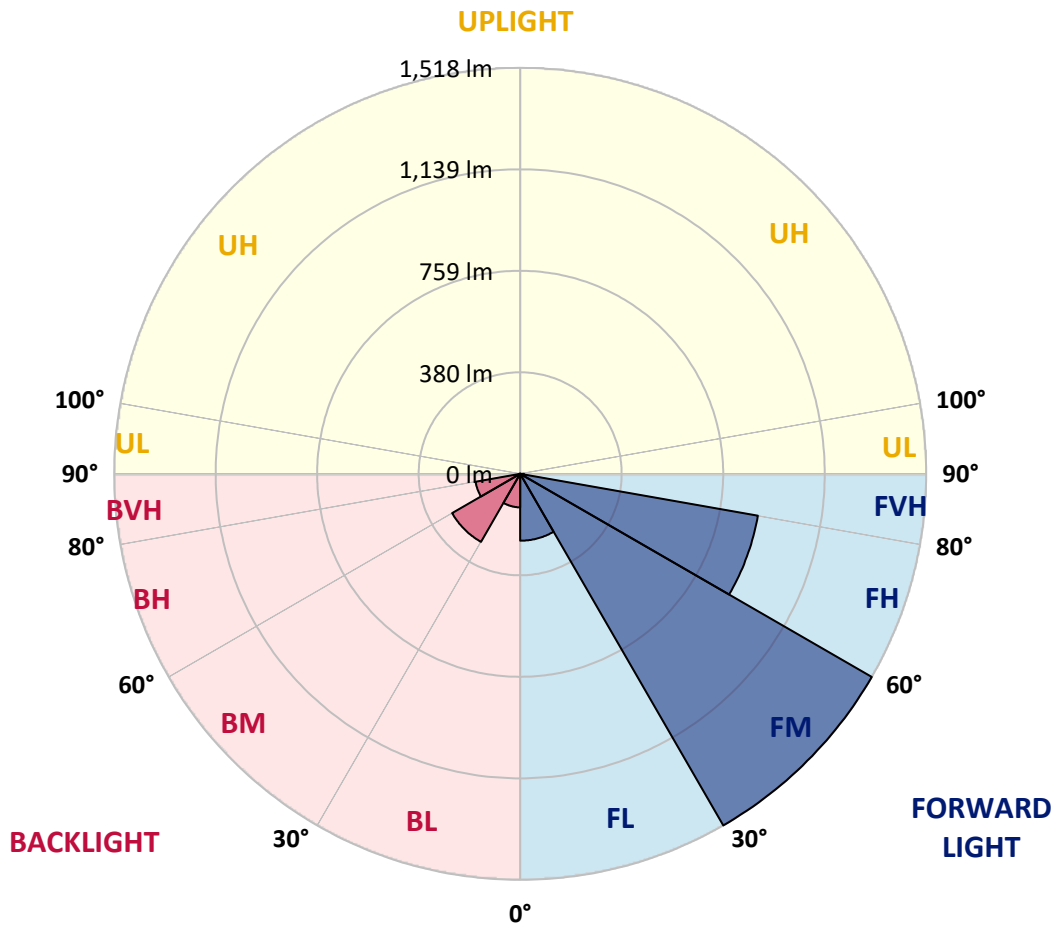
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	250.1	7.6			
FM (30°-60°)	1518.2	46.3			
FH (60°-80°)	902.5	27.5			G1/1800
FVH (80°-90°)	13.4	0.4			G1/100
BL (0°-30°)	125.4	3.8	B1/500		
BM (30°-60°)	293.9	9.0	B1/1000		
BH (60°-80°)	169.5	5.2	B1/500		G1/500
BVH (80°-90°)	5.0	0.2			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	543.1	543.1	543.1	543.1	543.1	543.1	543.1	543.1	543.1	543.1	543.1
2.5°	574.0	577.3	575.4	574.4	572.8	570.4	568.5	562.6	556.5	552.5	551.1
5°	585.5	588.8	588.6	589.5	590.7	591.4	591.0	584.4	575.6	568.8	564.8
7.5°	575.6	579.4	582.5	587.2	595.4	604.2	608.4	607.0	598.0	588.6	583.6
10°	547.5	551.5	558.9	570.0	587.4	606.3	622.1	629.4	623.8	613.4	606.5
12.5°	496.1	500.1	514.5	538.6	567.8	600.6	630.8	650.4	651.9	641.5	633.4
15°	438.3	442.3	457.6	487.8	532.4	585.1	635.6	672.6	685.1	676.2	666.5
17.5°	402.4	405.9	417.5	441.8	488.3	553.9	633.9	696.2	724.8	717.7	706.1
20°	391.5	394.6	400.0	417.0	455.7	521.6	623.1	718.4	767.5	763.5	750.5
22.5°	403.1	405.9	407.6	415.1	439.4	500.3	609.4	741.1	817.1	817.5	801.7
25°	429.8	432.6	430.7	435.4	446.1	493.7	604.2	767.7	879.4	884.6	866.6
27.5°	473.7	473.9	469.4	469.2	470.8	503.6	609.6	796.3	958.0	967.6	945.4
30°	561.7	558.2	540.9	522.3	513.8	533.4	624.7	830.0	1050.7	1067.9	1040.1
32.5°	697.4	692.2	660.6	616.0	571.1	581.3	651.9	868.5	1151.7	1182.9	1148.9
35°	844.7	843.3	810.2	743.9	665.5	649.5	696.0	919.0	1261.9	1311.5	1271.1
37.5°	981.6	980.8	962.0	883.8	788.5	744.6	766.8	985.1	1379.9	1451.7	1404.0
40°	1106.6	1108.8	1089.9	1020.0	924.0	866.6	863.1	1066.8	1511.2	1604.4	1547.7
42.5°	1214.7	1217.1	1198.0	1146.3	1057.8	1001.6	981.3	1166.8	1639.3	1768.4	1701.4
45°	1288.1	1302.8	1299.9	1258.6	1195.1	1136.8	1123.4	1292.4	1785.4	1942.3	1863.8
47.5°	1308.9	1322.4	1343.6	1349.3	1310.6	1253.2	1269.2	1443.7	1933.1	2116.5	2027.1
50°	1257.7	1270.2	1314.3	1373.1	1400.0	1382.3	1411.1	1605.8	2084.4	2290.2	2187.3
52.5°	1156.7	1169.4	1225.1	1318.1	1427.8	1483.5	1553.4	1765.6	2231.0	2454.7	2339.1
55°	1010.6	1024.0	1095.5	1200.8	1374.7	1525.3	1672.1	1925.1	2365.3	2602.7	2476.0
57.5°	811.9	821.8	896.1	1043.4	1241.2	1483.8	1759.7	2099.3	2491.8	2748.1	2611.7
60°	529.1	537.9	624.2	788.5	1019.8	1345.0	1777.1	2293.5	2659.8	2937.1	2794.6
62.5°	351.9	357.8	409.0	529.6	718.2	1078.6	1674.9	2448.6	2906.2	3266.1	3108.2
65°	241.4	247.3	298.5	382.6	464.0	713.5	1381.1	2428.0	3129.5	3527.4	3340.7
67.5°	172.3	177.2	220.7	300.0	335.8	414.4	936.2	2165.6	3097.4	3537.3	3353.2
70°	123.4	126.3	162.1	233.6	266.9	249.0	520.6	1656.3	2712.0	3266.3	3097.8
72.5°	86.4	87.3	112.6	177.9	215.0	181.7	247.8	1104.3	2051.1	2563.8	2401.6
75°	58.5	59.7	75.8	130.5	172.5	138.8	131.2	592.1	1204.1	1419.1	1272.1
77.5°	35.9	36.3	48.9	89.2	129.1	105.7	84.5	250.9	465.9	457.4	389.9
80°	20.3	20.3	31.2	55.5	88.0	68.2	59.2	106.7	147.5	129.6	114.2
82.5°	11.3	11.6	22.7	34.5	58.3	40.4	32.6	49.3	63.7	56.4	49.1
85°	4.7	5.2	13.9	16.3	27.8	20.1	13.2	20.8	23.6	21.0	15.3
87.5°	0.5	0.7	4.2	3.1	3.3	4.0	1.9	4.0	3.3	3.3	2.4
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°	543.1	543.1	543.1	543.1	543.1	543.1	543.1	543.1	543.1	543.1	543.1
2.5°	546.6	543.1	534.1	523.7	510.0	503.4	494.4	488.3	483.1	483.6	478.9
5°	557.2	548.2	528.2	503.2	472.0	449.8	426.2	409.9	396.7	393.9	387.5
7.5°	571.8	557.7	522.5	477.4	424.8	384.9	349.3	326.4	310.1	304.9	299.7
10°	590.7	570.2	515.2	445.1	369.4	318.6	280.4	262.4	251.3	247.6	244.7
12.5°	612.7	584.6	505.5	405.7	312.2	263.4	239.1	230.1	226.6	225.4	224.7
15°	640.3	602.5	490.9	359.0	263.9	229.6	219.3	218.1	218.5	218.1	217.8
17.5°	673.1	622.1	467.1	310.8	231.3	212.4	208.6	209.6	210.8	210.5	210.0
20°	709.0	641.5	436.6	268.1	209.1	200.1	198.0	199.0	199.9	199.4	199.2
22.5°	749.8	662.2	402.9	234.8	194.2	188.8	186.4	186.7	186.7	185.7	185.3
25°	798.6	685.1	367.5	211.2	182.9	178.7	175.8	174.9	173.5	170.6	170.2
27.5°	856.9	709.4	333.5	194.7	173.9	169.9	166.6	164.3	160.7	156.0	155.5
30°	922.6	738.9	304.7	184.3	166.9	162.8	159.1	155.5	150.3	144.4	144.0
32.5°	999.7	770.6	283.7	177.5	160.5	156.2	151.8	147.5	141.8	135.9	136.2
35°	1091.8	808.8	271.4	172.8	155.5	149.9	144.9	140.2	135.9	130.7	130.3
37.5°	1191.6	849.4	267.6	170.4	152.2	143.5	137.8	134.5	134.1	131.0	130.7
40°	1300.9	897.5	270.5	169.0	148.7	137.4	131.2	130.5	131.7	126.3	126.5
42.5°	1416.5	954.7	275.2	167.3	143.7	131.2	125.3	125.3	124.4	116.8	116.8
45°	1541.6	1020.5	279.9	163.3	137.8	125.1	120.6	118.9	114.9	107.6	107.4
47.5°	1667.6	1087.5	283.4	156.0	130.7	119.9	115.9	112.1	106.2	99.6	99.4
50°	1787.3	1147.7	279.7	145.1	122.7	114.9	110.7	105.5	99.1	94.6	93.9
52.5°	1894.2	1199.9	263.6	132.4	114.2	109.7	106.0	100.5	95.3	90.6	90.2
55°	1987.2	1242.1	235.3	120.4	106.7	105.3	101.5	94.6	87.6	83.5	83.1
57.5°	2076.4	1274.2	199.9	110.5	99.8	100.3	94.6	88.5	81.9	77.6	77.2
60°	2195.1	1317.2	164.0	101.2	92.5	93.9	87.8	83.3	75.1	69.6	68.9
62.5°	2384.9	1383.9	130.3	89.9	84.0	84.5	81.9	76.5	66.6	60.2	59.7
65°	2535.4	1359.4	102.7	77.6	74.3	75.1	75.1	69.2	58.5	51.2	50.5
67.5°	2518.4	1164.0	81.9	65.6	65.1	65.6	67.3	62.3	51.9	46.0	45.1
70°	2320.0	925.9	65.6	54.5	56.6	55.5	60.2	56.9	46.7	40.8	40.1
72.5°	1893.0	667.0	50.0	45.1	43.4	45.3	54.3	51.2	38.9	32.3	31.6
75°	1106.2	355.9	37.3	35.6	31.4	37.8	48.1	43.7	29.7	23.8	23.1
77.5°	360.1	124.1	27.4	26.2	23.4	30.4	41.1	36.8	24.3	18.9	18.2
80°	96.5	37.5	18.6	17.2	15.1	22.7	32.6	29.3	17.5	12.3	12.0
82.5°	38.7	15.8	10.9	9.7	8.3	15.6	25.7	23.6	13.0	7.8	7.8
85°	12.5	5.2	4.0	3.1	3.8	9.7	15.3	16.0	9.2	4.0	3.1
87.5°	1.7	0.7	0.7	0.9	0.7	1.7	4.7	4.5	2.6	0.5	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)