

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: P881786

Luminaire Tested: **NAV-SB1B-835-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881786
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-SB1B-835-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 450mA 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: 3471.9 lumens
Efficiency: N/A
Efficacy: 87.2 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

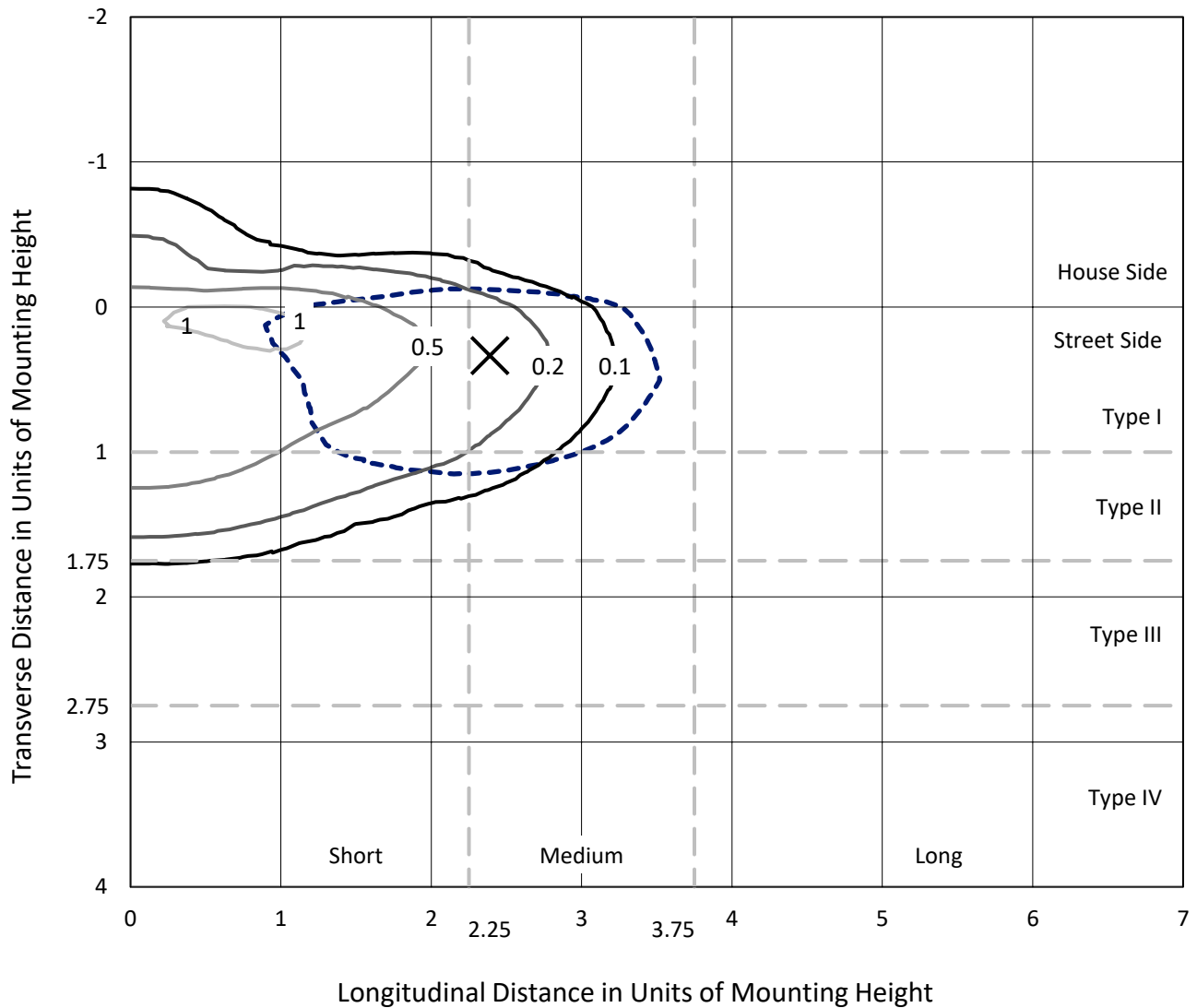
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

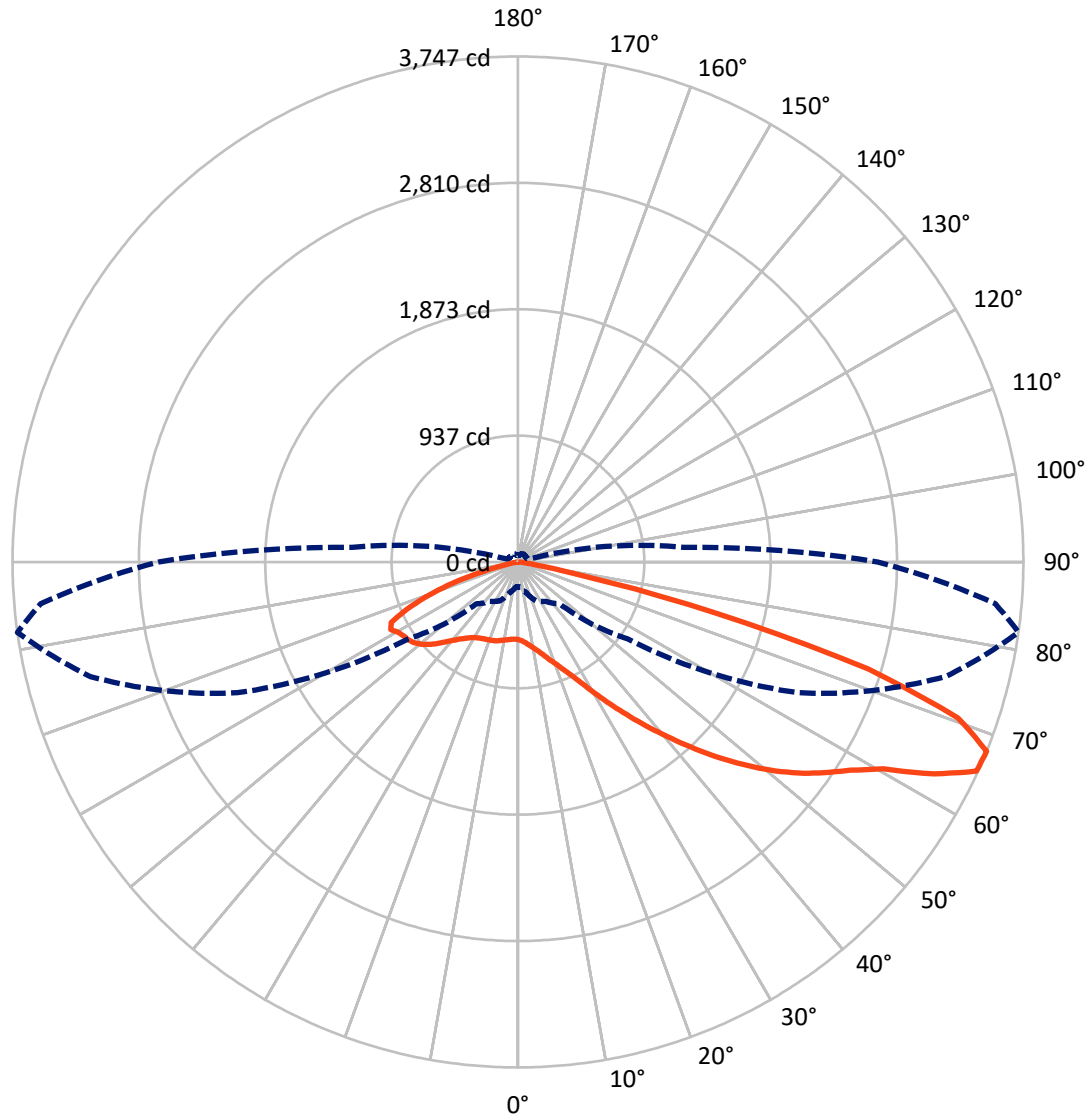
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 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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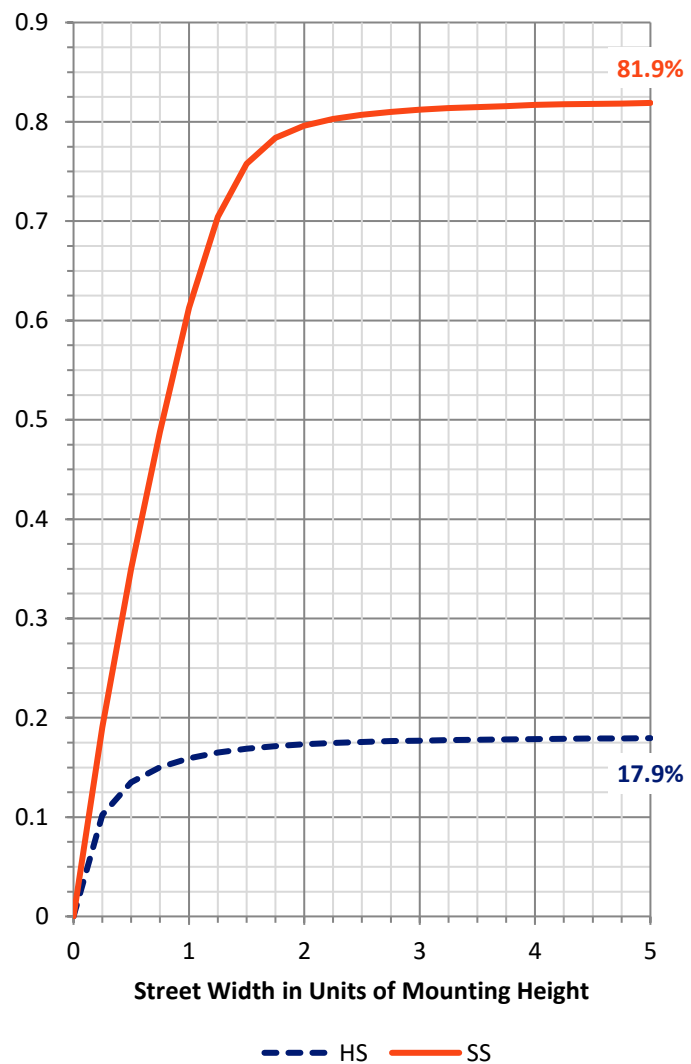
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	628.9	0.0	628.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	2843.1	0.0	2843.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	3471.9	0.0	3471.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.2	1.5
10°-20°	133.2	3.8
20°-30°	213.3	6.1
30°-40°	377.2	10.9
40°-50°	660.8	19.0
50°-60°	881.3	25.4
60°-70°	820.5	23.6
70°-80°	314.9	9.1
80°-90°	19.5	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°	3471.9	100.0
0°-180°	3471.9	100.0

Coefficient of Utilization



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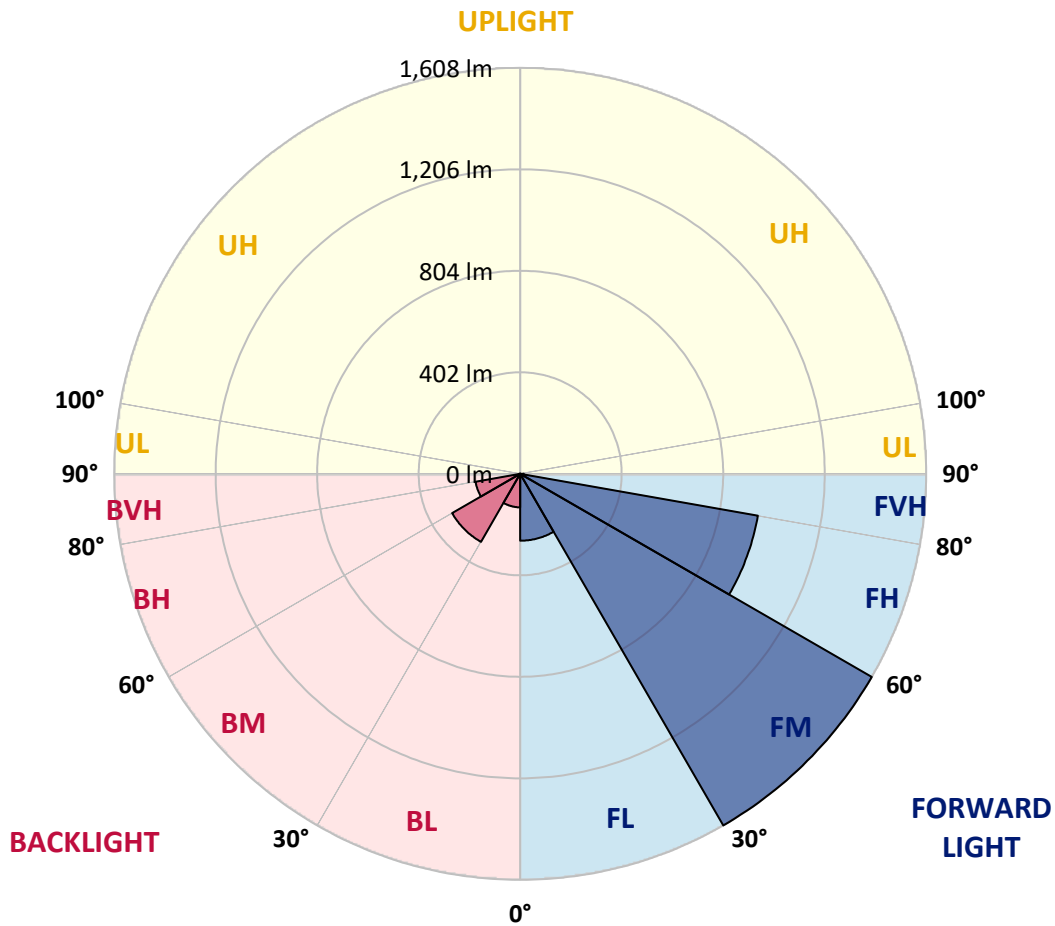
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	264.9	7.6			
FM	(30°-60°)	1608.1	46.3			
FH	(60°-80°)	955.9	27.5			G1/1800
FVH	(80°-90°)	14.2	0.4			G1/100
BL	(0°-30°)	132.8	3.8	B1/500		
BM	(30°-60°)	311.2	9.0	B1/1000		
BH	(60°-80°)	179.5	5.2	B1/500		G1/500
BVH	(80°-90°)	5.3	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°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2
2.5°	607.9	611.4	609.4	608.4	606.7	604.2	602.2	595.9	589.4	585.2	583.7
5°	620.2	623.7	623.4	624.4	625.7	626.4	625.9	618.9	609.7	602.4	598.2
7.5°	609.7	613.7	616.9	621.9	630.7	639.9	644.4	642.9	633.4	623.4	618.2
10°	579.9	584.2	591.9	603.7	622.2	642.2	658.9	666.7	660.7	649.7	642.4
12.5°	525.4	529.7	544.9	570.4	601.4	636.2	668.2	688.9	690.4	679.4	670.9
15°	464.2	468.5	484.7	516.7	563.9	619.7	673.2	712.4	725.7	716.2	705.9
17.5°	426.2	430.0	442.2	468.0	517.2	586.7	671.4	737.4	767.7	760.2	747.9
20°	414.7	418.0	423.7	441.7	482.7	552.4	659.9	760.9	812.9	808.7	794.9
22.5°	427.0	430.0	431.7	439.7	465.5	529.9	645.4	784.9	865.4	865.9	849.2
25°	455.2	458.2	456.2	461.2	472.5	522.9	639.9	813.2	931.4	936.9	917.9
27.5°	501.7	502.0	497.2	497.0	498.7	533.4	645.7	843.4	1014.6	1024.9	1001.4
30°	594.9	591.2	572.9	553.2	544.2	564.9	661.7	879.2	1112.9	1131.1	1101.6
32.5°	738.7	733.2	699.7	652.4	604.9	615.7	690.4	919.9	1219.9	1252.9	1216.9
35°	894.7	893.2	858.2	787.9	704.9	687.9	737.2	973.4	1336.6	1389.1	1346.4
37.5°	1039.6	1038.9	1018.9	936.2	835.2	788.7	812.2	1043.4	1461.6	1537.6	1487.1
40°	1172.1	1174.4	1154.4	1080.4	978.7	917.9	914.2	1129.9	1600.6	1699.3	1639.3
42.5°	1286.6	1289.1	1268.9	1214.1	1120.4	1060.9	1039.4	1235.9	1736.3	1873.1	1802.1
45°	1364.4	1379.9	1376.9	1333.1	1265.9	1204.1	1189.9	1368.9	1891.1	2057.3	1974.1
47.5°	1386.4	1400.6	1423.1	1429.1	1388.1	1327.4	1344.4	1529.1	2047.5	2241.8	2147.0
50°	1332.1	1345.4	1392.1	1454.4	1482.9	1464.1	1494.6	1700.8	2207.8	2425.8	2316.8
52.5°	1225.1	1238.6	1297.6	1396.1	1512.3	1571.3	1645.3	1870.1	2363.0	2600.0	2477.5
55°	1070.4	1084.6	1160.4	1271.9	1456.1	1615.6	1771.1	2039.0	2505.3	2756.7	2622.5
57.5°	859.9	870.4	949.2	1105.1	1314.6	1571.6	1863.8	2223.5	2639.2	2910.7	2766.2
60°	560.4	569.7	661.2	835.2	1080.1	1424.6	1882.3	2429.3	2817.2	3110.9	2960.0
62.5°	372.7	379.0	433.2	560.9	760.7	1142.4	1774.1	2593.5	3078.2	3459.4	3292.2
65°	255.7	262.0	316.2	405.2	491.5	755.7	1462.9	2571.7	3314.7	3736.1	3538.4
67.5°	182.5	187.7	233.7	317.7	355.7	439.0	991.7	2293.8	3280.7	3746.6	3551.6
70°	130.7	133.7	171.7	247.5	282.7	263.7	551.4	1754.3	2872.5	3459.7	3281.2
72.5°	91.5	92.5	119.2	188.5	227.7	192.5	262.5	1169.6	2172.5	2715.5	2543.7
75°	62.0	63.2	80.2	138.2	182.7	147.0	139.0	627.2	1275.4	1503.1	1347.4
77.5°	38.0	38.5	51.7	94.5	136.7	112.0	89.5	265.7	493.5	484.5	413.0
80°	21.5	21.5	33.0	58.7	93.2	72.2	62.7	113.0	156.2	137.2	121.0
82.5°	12.0	12.2	24.0	36.5	61.7	42.7	34.5	52.2	67.5	59.7	52.0
85°	5.0	5.5	14.7	17.2	29.5	21.2	14.0	22.0	25.0	22.2	16.2
87.5°	0.5	0.7	4.5	3.2	3.5	4.2	2.0	4.2	3.5	3.5	2.5
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°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2
2.5°	578.9	575.2	565.7	554.7	540.2	533.2	523.7	517.2	511.7	512.2	507.2
5°	590.2	580.7	559.4	532.9	500.0	476.5	451.5	434.2	420.2	417.2	410.5
7.5°	605.7	590.7	553.4	505.7	450.0	407.7	370.0	345.7	328.5	323.0	317.5
10°	625.7	603.9	545.7	471.5	391.2	337.5	297.0	278.0	266.2	262.2	259.2
12.5°	648.9	619.2	535.4	429.7	330.7	279.0	253.2	243.7	240.0	238.7	238.0
15°	678.2	638.2	519.9	380.2	279.5	243.2	232.2	231.0	231.5	231.0	230.7
17.5°	712.9	658.9	494.7	329.2	245.0	225.0	221.0	222.0	223.2	223.0	222.5
20°	750.9	679.4	462.5	284.0	221.5	212.0	209.7	210.7	211.7	211.2	211.0
22.5°	794.2	701.4	426.7	248.7	205.7	200.0	197.5	197.7	197.7	196.7	196.2
25°	845.9	725.7	389.2	223.7	193.7	189.2	186.2	185.2	183.7	180.7	180.2
27.5°	907.7	751.4	353.2	206.2	184.2	180.0	176.5	174.0	170.2	165.2	164.7
30°	977.2	782.7	322.7	195.2	176.7	172.5	168.5	164.7	159.2	153.0	152.5
32.5°	1058.9	816.2	300.5	188.0	170.0	165.5	160.7	156.2	150.2	144.0	144.2
35°	1156.4	856.7	287.5	183.0	164.7	158.7	153.5	148.5	144.0	138.5	138.0
37.5°	1262.1	899.7	283.5	180.5	161.2	152.0	146.0	142.5	142.0	138.7	138.5
40°	1377.9	950.7	286.5	179.0	157.5	145.5	139.0	138.2	139.5	133.7	134.0
42.5°	1500.4	1011.1	291.5	177.2	152.2	139.0	132.7	132.7	131.7	123.7	123.7
45°	1632.8	1080.9	296.5	173.0	146.0	132.5	127.7	126.0	121.7	114.0	113.7
47.5°	1766.3	1151.9	300.2	165.2	138.5	127.0	122.7	118.7	112.5	105.5	105.2
50°	1893.1	1215.6	296.2	153.7	130.0	121.7	117.2	111.7	105.0	100.2	99.5
52.5°	2006.3	1270.9	279.2	140.2	121.0	116.2	112.2	106.5	101.0	96.0	95.5
55°	2104.8	1315.6	249.2	127.5	113.0	111.5	107.5	100.2	92.7	88.5	88.0
57.5°	2199.3	1349.6	211.7	117.0	105.7	106.2	100.2	93.7	86.7	82.2	81.7
60°	2325.0	1395.1	173.7	107.2	98.0	99.5	93.0	88.2	79.5	73.7	73.0
62.5°	2526.0	1465.9	138.0	95.2	89.0	89.5	86.7	81.0	70.5	63.7	63.2
65°	2685.5	1439.9	108.7	82.2	78.7	79.5	79.5	73.2	62.0	54.2	53.5
67.5°	2667.5	1232.9	86.7	69.5	69.0	69.5	71.2	66.0	55.0	48.7	47.7
70°	2457.3	980.7	69.5	57.7	60.0	58.7	63.7	60.2	49.5	43.2	42.5
72.5°	2005.1	706.4	53.0	47.7	46.0	48.0	57.5	54.2	41.2	34.2	33.5
75°	1171.6	377.0	39.5	37.7	33.2	40.0	51.0	46.2	31.5	25.2	24.5
77.5°	381.5	131.5	29.0	27.7	24.7	32.2	43.5	39.0	25.7	20.0	19.2
80°	102.2	39.7	19.7	18.2	16.0	24.0	34.5	31.0	18.5	13.0	12.7
82.5°	41.0	16.7	11.5	10.2	8.7	16.5	27.2	25.0	13.7	8.2	8.2
85°	13.2	5.5	4.2	3.2	4.0	10.2	16.2	17.0	9.7	4.2	3.2
87.5°	1.7	0.7	0.7	1.0	0.7	1.7	5.0	4.7	2.7	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)