

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: P961436

Luminaire Tested: **NAV-SB2A-740-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961436
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-740-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7103.2 lumens
Efficiency: N/A
Efficacy: 124.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

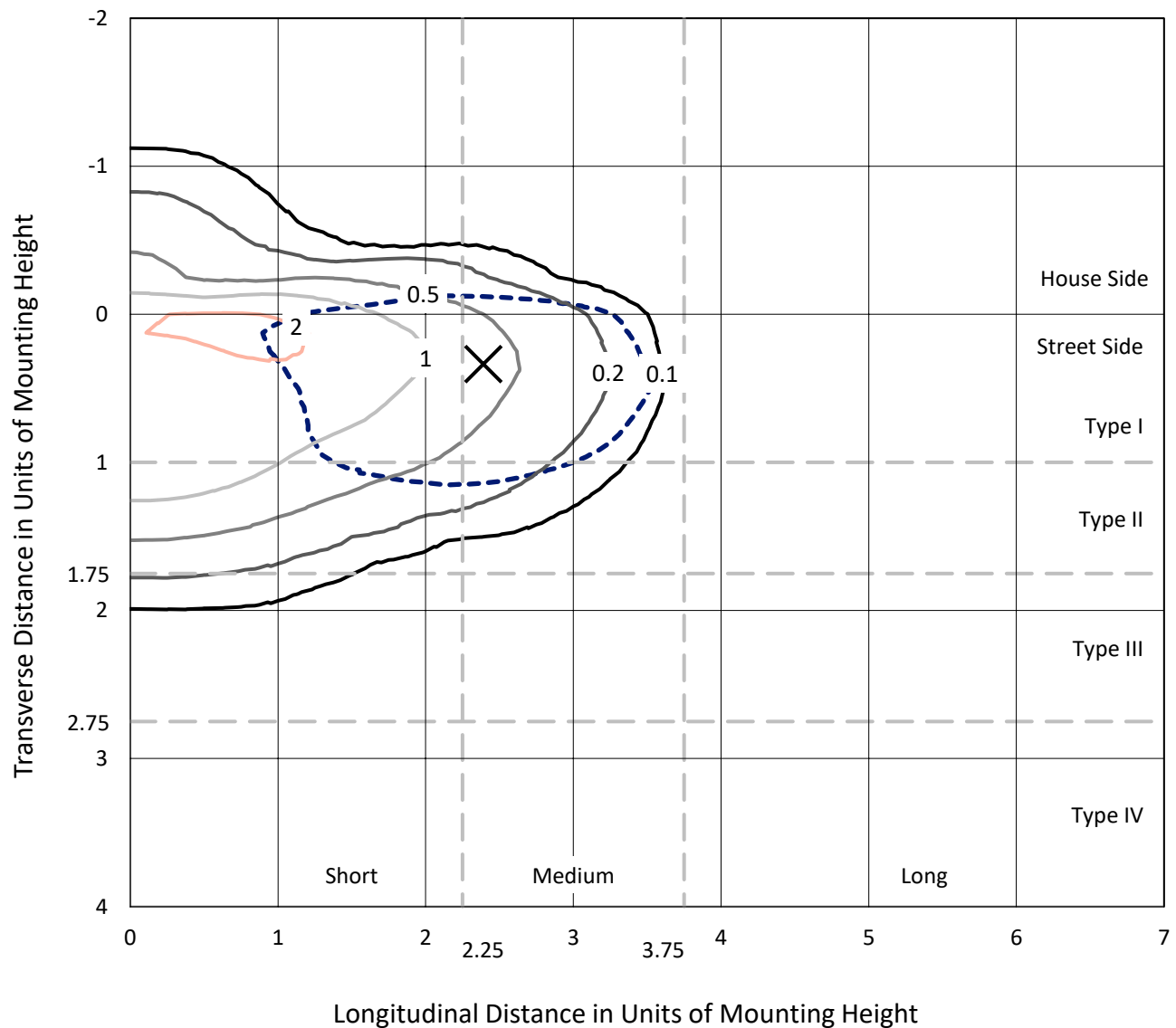


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Iso-Footcandle Lines of Horizontal Illumination

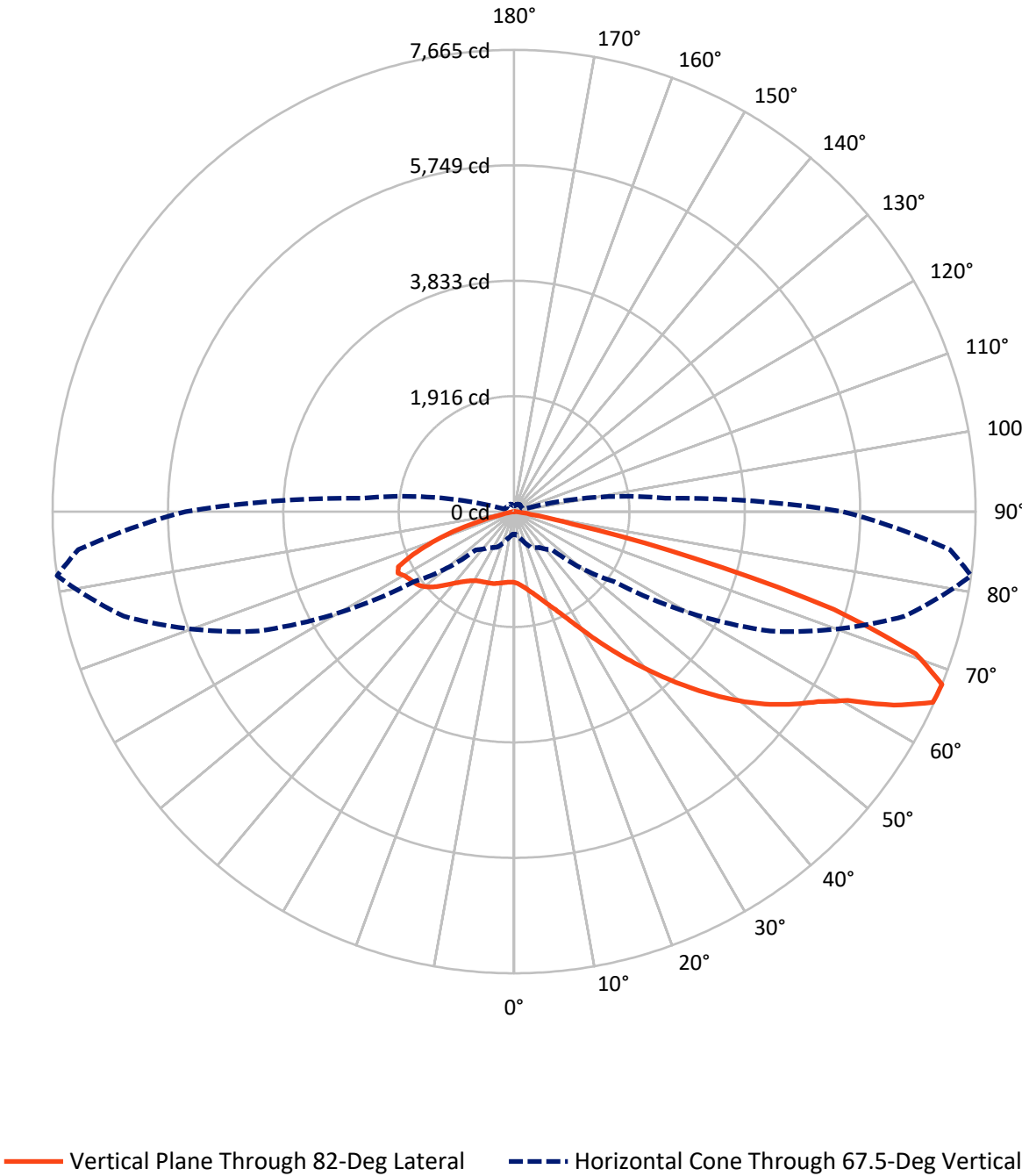
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1286.7	0.0	1286.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	5816.6	0.0	5816.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	7103.2	0.0	7103.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.8	1.5
10°-20°	272.4	3.8
20°-30°	436.4	6.1
30°-40°	771.6	10.9
40°-50°	1352.0	19.0
50°-60°	1803.1	25.4
60°-70°	1678.6	23.6
70°-80°	644.3	9.1
80°-90°	40.0	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°	7103.2	100.0
0°-180°	7103.2	100.0

Coefficient of Utilization



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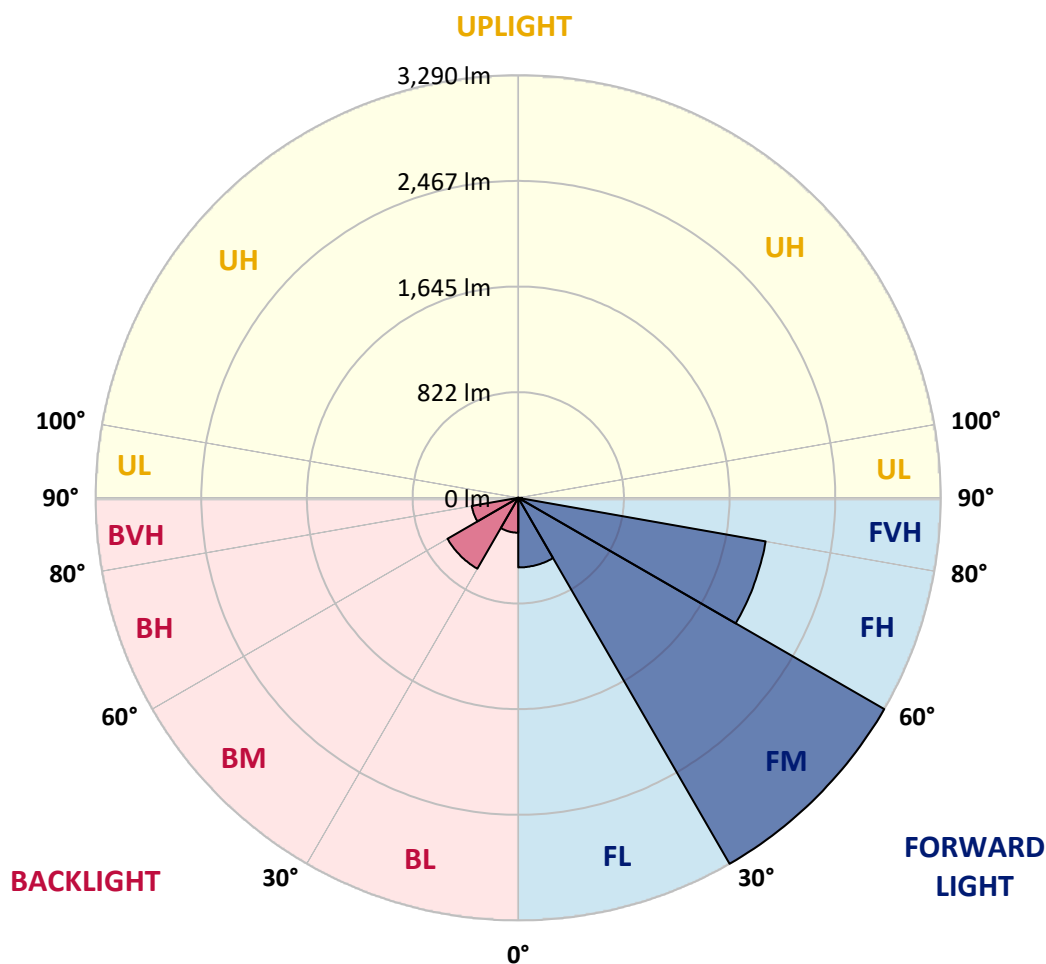
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	541.9	7.6			
FM	(30°-60°)	3289.9	46.3			
FH	(60°-80°)	1955.6	27.5			G2/5000
FVH	(80°-90°)	29.1	0.4			G1/100
BL	(0°-30°)	271.7	3.8	B1/500		
BM	(30°-60°)	636.8	9.0	B1/1000		
BH	(60°-80°)	367.2	5.2	B1/500		G1/500
BVH	(80°-90°)	10.9	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1176.8	1176.8	1176.8	1176.8	1176.8	1176.8	1176.8	1176.8	1176.8	1176.8	1176.8
2.5°	1243.7	1250.9	1246.8	1244.8	1241.2	1236.0	1232.0	1219.2	1205.9	1197.2	1194.1
5°	1268.8	1276.0	1275.5	1277.6	1280.1	1281.6	1280.6	1266.3	1247.3	1232.6	1223.8
7.5°	1247.3	1255.5	1262.2	1272.4	1290.3	1309.2	1318.5	1315.4	1295.9	1275.5	1264.7
10°	1186.4	1195.1	1211.0	1235.0	1272.9	1313.8	1348.1	1364.0	1351.7	1329.2	1314.4
12.5°	1075.0	1083.7	1114.9	1167.1	1230.5	1301.5	1367.0	1409.5	1412.6	1390.0	1372.7
15°	949.7	958.4	991.6	1057.1	1153.7	1267.8	1377.3	1457.6	1484.6	1465.2	1444.2
17.5°	872.0	879.7	904.7	957.4	1058.1	1200.3	1373.7	1508.7	1570.6	1555.2	1530.1
20°	848.4	855.1	866.8	903.6	987.6	1130.3	1350.1	1556.8	1663.2	1654.5	1626.3
22.5°	873.5	879.7	883.2	899.5	952.2	1084.2	1320.5	1605.9	1770.5	1771.5	1737.3
25°	931.3	937.5	933.4	943.5	966.6	1069.9	1309.2	1663.7	1905.6	1916.7	1877.9
27.5°	1026.4	1026.9	1017.2	1016.7	1020.3	1091.3	1321.0	1725.5	2075.8	2096.8	2048.8
30°	1217.2	1209.5	1172.2	1131.8	1113.4	1155.8	1353.7	1798.7	2276.8	2314.1	2253.8
32.5°	1511.3	1500.0	1431.4	1334.8	1237.6	1259.6	1412.6	1882.0	2495.7	2563.2	2489.6
35°	1830.3	1827.3	1755.7	1612.0	1442.2	1407.4	1508.2	1991.5	2734.5	2841.9	2754.5
37.5°	2127.0	2125.4	2084.5	1915.2	1708.7	1613.6	1661.6	2134.7	2990.2	3145.7	3042.4
40°	2398.0	2402.6	2361.7	2210.3	2002.2	1877.9	1870.2	2311.6	3274.6	3476.6	3353.9
42.5°	2632.3	2637.3	2595.9	2484.0	2292.2	2170.4	2126.5	2528.5	3552.3	3832.1	3686.8
45°	2791.3	2823.1	2816.9	2727.4	2589.8	2463.5	2434.4	2800.5	3868.9	4209.0	4038.6
47.5°	2836.3	2865.5	2911.5	2923.8	2839.9	2715.6	2750.4	3128.3	4189.0	4586.4	4392.5
50°	2725.4	2752.4	2848.1	2975.4	3033.7	2995.4	3057.8	3479.7	4516.9	4962.7	4739.8
52.5°	2506.4	2534.1	2654.7	2856.3	3094.1	3214.8	3366.1	3825.9	4834.4	5319.2	5068.6
55°	2189.9	2219.0	2374.0	2602.1	2979.0	3305.3	3623.4	4171.6	5125.4	5639.9	5365.3
57.5°	1759.3	1780.7	1941.9	2260.9	2689.5	3215.3	3813.1	4549.1	5399.5	5954.9	5659.3
60°	1146.6	1165.5	1352.7	1708.7	2209.8	2914.6	3850.9	4969.9	5763.7	6364.5	6055.7
62.5°	762.5	775.3	886.3	1147.6	1556.3	2337.2	3629.5	5305.9	6297.6	7077.5	6735.4
65°	523.2	536.0	647.0	829.0	1005.4	1546.0	2992.8	5261.4	6781.4	7643.6	7239.1
67.5°	373.3	384.1	478.2	650.1	727.7	898.0	2028.8	4692.8	6711.8	7665.1	7266.2
70°	267.4	273.6	351.4	506.4	578.4	539.6	1128.2	3589.1	5876.6	7078.0	6712.8
72.5°	187.2	189.2	244.0	385.6	465.9	393.8	537.0	2393.0	4444.7	5555.5	5204.1
75°	126.8	129.4	164.2	282.8	373.8	300.7	284.3	1283.1	2609.2	3075.1	2756.5
77.5°	77.7	78.7	105.9	193.3	279.7	229.1	183.1	543.7	1009.5	991.2	844.9
80°	44.0	44.0	67.5	120.2	190.8	147.8	128.3	231.1	319.6	280.7	247.5
82.5°	24.5	25.0	49.1	74.6	126.3	87.4	70.6	106.9	138.1	122.2	106.4
85°	10.2	11.3	30.1	35.3	60.4	43.5	28.6	45.0	51.1	45.5	33.2
87.5°	1.0	1.5	9.2	6.7	7.2	8.7	4.1	8.7	7.2	7.2	5.1
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°	1176.8	1176.8	1176.8	1176.8	1176.8	1176.8	1176.8	1176.8	1176.8	1176.8	1176.8
2.5°	1184.5	1176.8	1157.3	1134.9	1105.2	1090.8	1071.4	1058.1	1046.8	1047.9	1037.7
5°	1207.4	1188.0	1144.5	1090.3	1022.8	974.8	923.6	888.4	859.7	853.5	839.8
7.5°	1239.1	1208.5	1132.3	1034.6	920.6	834.1	756.9	707.2	672.0	660.7	649.5
10°	1280.1	1235.5	1116.4	964.5	800.3	690.4	607.5	568.7	544.7	536.5	530.3
12.5°	1327.7	1266.8	1095.4	879.1	676.6	570.7	518.0	498.7	491.0	488.4	486.9
15°	1387.4	1305.6	1063.7	777.9	571.7	497.6	475.1	472.5	473.6	472.5	472.0
17.5°	1458.6	1348.1	1012.1	673.5	501.2	460.2	452.1	454.2	456.7	456.2	455.2
20°	1536.3	1390.0	946.1	581.0	453.2	433.7	429.1	431.1	433.2	432.1	431.6
22.5°	1624.7	1435.0	873.0	508.8	420.9	409.2	404.1	404.6	404.6	402.5	401.5
25°	1730.6	1484.6	796.3	457.8	396.4	387.1	381.0	378.9	375.9	369.7	368.7
27.5°	1857.0	1537.3	722.6	421.9	376.9	368.2	361.1	356.0	348.3	338.0	337.0
30°	1999.2	1601.3	660.2	399.4	361.6	352.9	344.7	337.0	325.7	313.0	312.0
32.5°	2166.3	1669.7	614.7	384.6	347.8	338.6	328.8	319.6	307.4	294.6	295.1
35°	2365.8	1752.6	588.1	374.3	337.0	324.7	314.1	303.8	294.6	283.3	282.3
37.5°	2582.2	1840.6	579.9	369.2	329.8	311.0	298.7	291.5	290.5	283.8	283.3
40°	2819.0	1944.9	586.1	366.1	322.2	297.7	284.3	282.8	285.4	273.6	274.1
42.5°	3069.6	2068.7	596.3	362.6	311.5	284.3	271.5	271.5	269.5	253.2	253.2
45°	3340.6	2211.3	606.5	353.9	298.7	271.0	261.4	257.8	249.1	233.2	232.7
47.5°	3613.6	2356.6	614.2	338.0	283.3	259.8	251.1	242.9	230.1	215.9	215.4
50°	3873.0	2487.1	606.0	314.5	266.0	249.1	239.8	228.6	214.8	205.1	203.6
52.5°	4104.6	2600.0	571.2	286.9	247.5	237.8	229.6	217.8	206.6	196.4	195.4
55°	4306.1	2691.5	509.8	260.9	231.1	228.1	219.9	205.1	189.7	181.0	180.0
57.5°	4499.4	2761.1	433.2	239.3	216.4	217.4	205.1	191.8	177.4	168.3	167.3
60°	4756.7	2854.2	355.5	219.4	200.5	203.6	190.2	180.5	162.7	150.9	149.3
62.5°	5167.8	2998.9	282.3	194.9	182.0	183.1	177.4	165.7	144.2	130.4	129.4
65°	5494.1	2945.7	222.4	168.3	161.1	162.7	162.7	149.9	126.8	111.0	109.5
67.5°	5457.3	2522.3	177.4	142.2	141.1	142.2	145.8	135.0	112.5	99.7	97.7
70°	5027.2	2006.3	142.2	118.2	122.7	120.2	130.4	123.2	101.3	88.5	86.9
72.5°	4102.0	1445.2	108.4	97.7	94.1	98.2	117.7	111.0	84.4	70.1	68.6
75°	2397.0	771.2	80.8	77.2	68.1	81.8	104.3	94.6	64.5	51.7	50.1
77.5°	780.4	269.0	59.3	56.8	50.6	66.0	89.0	79.7	52.7	40.9	39.4
80°	209.2	81.3	40.4	37.3	32.7	49.1	70.6	63.4	37.8	26.5	26.0
82.5°	83.8	34.2	23.6	21.0	17.9	33.7	55.8	51.1	28.1	16.9	16.9
85°	27.1	11.3	8.7	6.7	8.2	21.0	33.2	34.7	20.0	8.7	6.7
87.5°	3.6	1.5	1.5	2.0	1.5	3.6	10.2	9.7	5.6	1.0	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)