

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: P959859

Luminaire Tested: **NAV-SB1B-740-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959859
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-740-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6190 lumens
Efficiency: N/A
Efficacy: 155.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 39.8
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

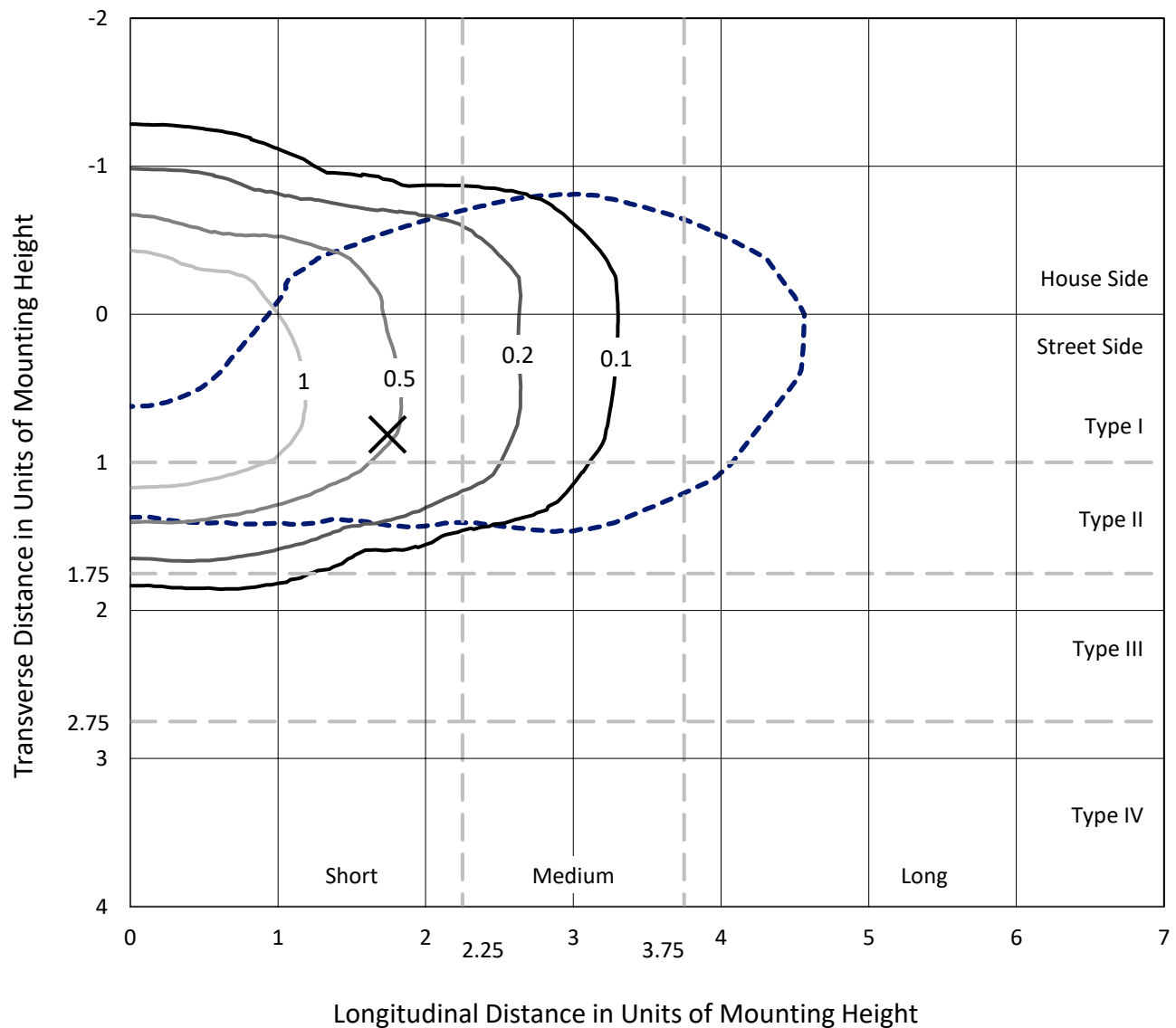


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Iso-Footcandle Lines of Horizontal Illumination

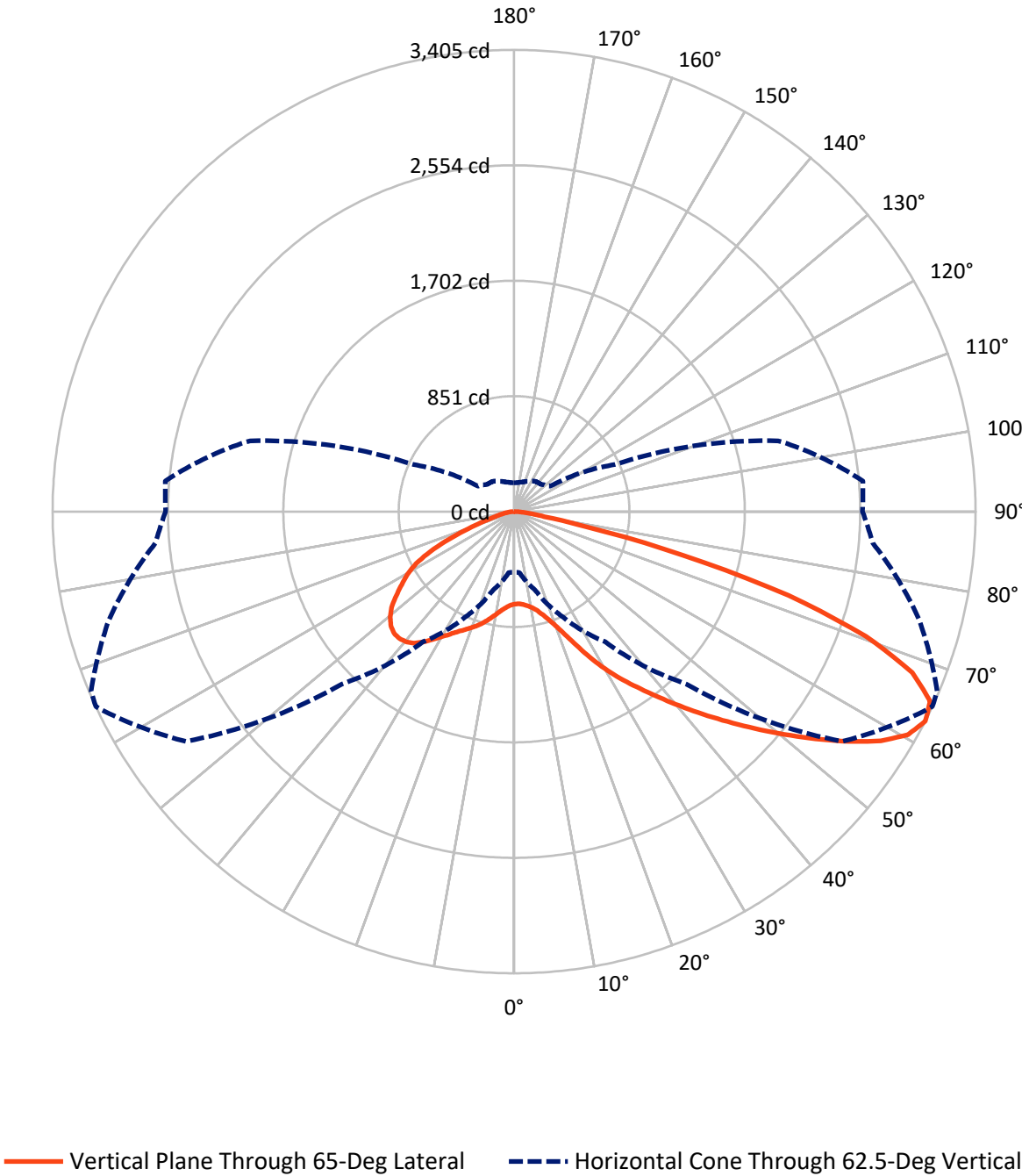
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1953.3	0.0	1953.3
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	4236.7	0.0	4236.7
	% Fixture	68.4	0.0	68.4
Total	Lumens	6190.0	0.0	6190.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.0	1.1
10°-20°	230.6	3.7
20°-30°	467.6	7.6
30°-40°	809.2	13.1
40°-50°	1224.5	19.8
50°-60°	1435.7	23.2
60°-70°	1203.6	19.4
70°-80°	664.5	10.7
80°-90°	86.3	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°	6190.0	100.0
0°-180°	6190.0	100.0

Coefficient of Utilization



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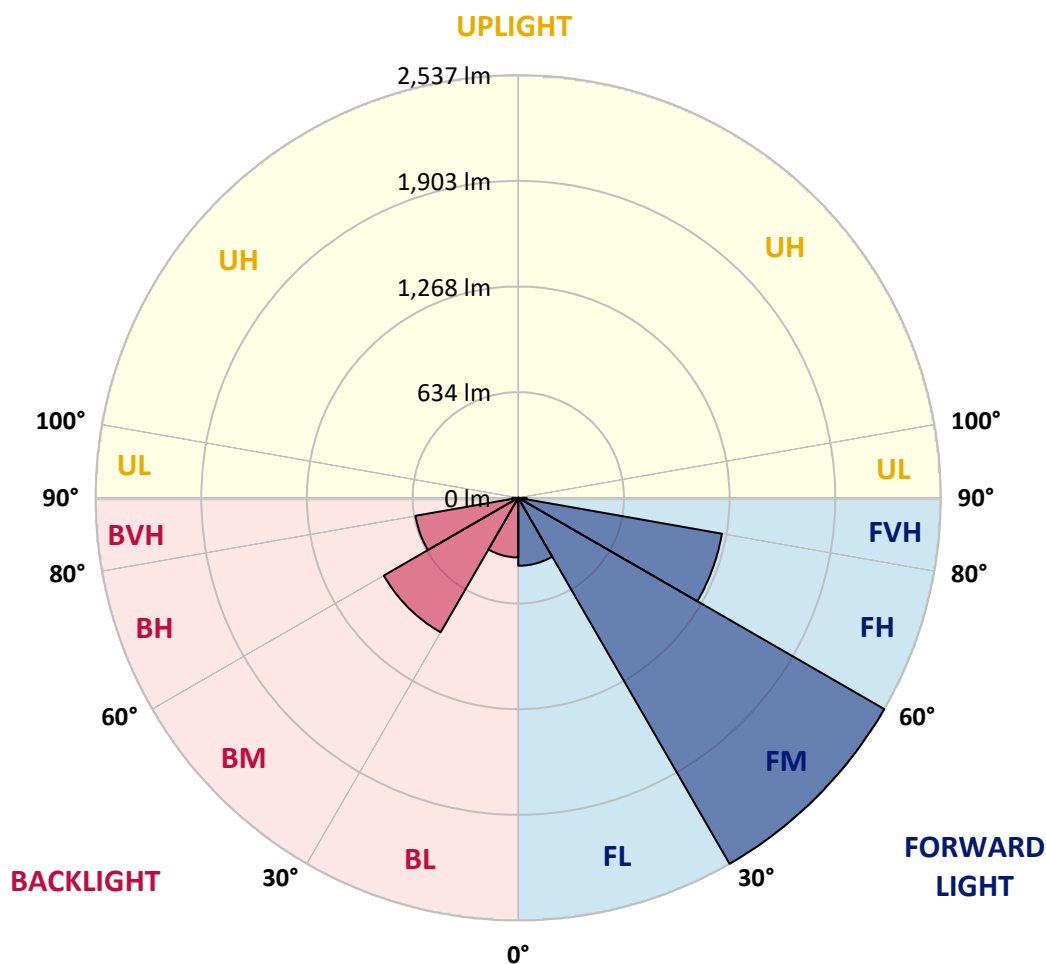
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	408.0	6.6			
FM	(30°-60°)	2536.8	41.0			
FH	(60°-80°)	1241.5	20.1			G1/1800
FVH	(80°-90°)	50.3	0.8			G1/100
BL	(0°-30°)	358.2	5.8	B1/500		
BM	(30°-60°)	932.5	15.1	B1/1000		
BH	(60°-80°)	626.6	10.1	B2/1000		G2/1000
BVH	(80°-90°)	36.0	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1
2.5°	677.6	675.7	677.3	677.3	677.9	677.6	679.9	680.5	681.4	683.4	683.4
5°	670.9	670.6	673.4	676.0	678.6	680.8	683.7	687.9	688.5	690.7	693.7
7.5°	668.6	666.7	671.2	674.4	680.5	685.9	693.7	700.7	703.7	704.6	710.0
10°	685.9	682.8	687.0	688.9	694.0	699.5	708.5	719.7	722.9	726.7	732.9
12.5°	715.6	712.0	718.1	721.0	725.8	730.6	736.7	747.6	749.3	756.2	762.1
15°	755.9	751.8	755.6	759.2	767.2	771.7	777.8	788.4	788.4	793.9	798.1
17.5°	810.9	805.4	808.3	809.6	814.8	821.4	831.8	841.1	845.9	844.0	838.1
20°	892.8	886.0	886.0	879.7	877.7	883.1	896.7	909.5	914.6	904.7	890.5
22.5°	1015.8	1006.1	1000.7	978.9	970.2	970.8	984.3	1000.0	1004.2	986.6	954.8
25°	1172.2	1157.1	1149.7	1117.6	1098.0	1081.0	1091.5	1111.8	1117.6	1095.7	1044.4
27.5°	1328.6	1329.5	1322.5	1283.9	1251.5	1220.4	1214.9	1236.0	1242.2	1217.5	1153.8
30°	1548.0	1525.1	1511.7	1465.3	1419.1	1375.4	1353.0	1361.6	1363.2	1333.7	1259.8
32.5°	1737.1	1731.3	1702.4	1661.9	1602.5	1534.1	1496.5	1482.8	1480.1	1438.1	1350.4
35°	1952.5	1949.3	1918.8	1870.6	1806.5	1711.3	1643.6	1604.1	1600.9	1541.8	1440.0
37.5°	2171.6	2171.6	2141.7	2089.1	2022.5	1903.7	1800.6	1738.0	1727.7	1650.7	1531.2
40°	2346.2	2335.7	2341.1	2319.0	2242.9	2116.6	1975.1	1884.2	1870.3	1777.9	1628.2
42.5°	2445.5	2442.0	2474.8	2499.5	2468.3	2367.4	2167.1	2042.5	2023.2	1917.9	1739.9
45°	2467.7	2463.8	2522.2	2612.8	2656.5	2615.1	2375.8	2209.2	2185.7	2064.4	1859.8
47.5°	2416.6	2408.9	2494.6	2637.5	2777.5	2850.4	2601.9	2390.0	2355.9	2206.9	1982.8
50°	2263.1	2255.7	2385.5	2575.2	2818.3	3010.4	2847.2	2581.7	2529.6	2359.8	2107.0
52.5°	1929.5	1932.9	2136.2	2397.0	2764.7	3110.0	3058.6	2783.7	2721.1	2516.2	2223.6
55°	1503.0	1510.6	1760.5	2047.6	2550.2	3094.9	3202.7	2991.8	2929.4	2663.3	2344.1
57.5°	1076.1	1110.2	1344.3	1628.5	2138.1	2855.6	3234.3	3189.6	3129.2	2823.8	2461.8
60°	697.5	703.7	944.4	1230.9	1628.2	2430.4	3170.3	3339.6	3292.4	2987.6	2560.4
62.5°	447.0	451.2	598.0	861.0	1171.9	1798.1	2955.2	3404.7	3390.3	3095.8	2655.3
65°	328.5	325.3	401.8	569.1	789.4	1108.9	2537.4	3373.3	3401.9	3163.6	2733.6
67.5°	274.3	269.8	307.3	394.0	581.6	629.8	1877.4	3168.7	3273.4	3155.9	2791.1
70°	249.9	246.0	268.8	292.5	453.8	421.7	946.4	2754.8	2916.0	3068.2	2781.7
72.5°	211.7	204.9	236.1	259.8	352.9	323.4	391.1	2116.0	2312.5	2787.2	2650.8
75°	164.1	159.6	186.2	228.7	265.3	252.5	247.2	1284.9	1499.4	2155.5	2319.0
77.5°	130.1	123.9	148.3	178.2	238.6	190.4	180.2	553.3	765.9	1376.1	1735.1
80°	98.0	92.5	112.7	140.9	183.4	143.5	116.5	225.8	288.7	697.2	872.6
82.5°	69.7	64.9	78.7	103.4	123.3	128.7	71.6	126.5	142.3	268.8	195.0
85°	44.7	41.7	52.7	64.9	78.3	82.8	43.7	66.1	72.6	110.8	81.3
87.5°	24.4	19.9	28.3	30.2	36.3	33.1	20.9	24.1	26.0	40.2	34.3
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°	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1
2.5°	684.7	685.6	688.9	689.8	692.1	694.9	696.9	698.8	698.8	700.7	700.7
5°	694.0	696.3	702.9	706.5	712.3	718.1	721.6	725.8	728.4	729.6	730.3
7.5°	712.0	715.6	725.2	731.2	741.2	749.3	754.7	760.4	761.8	765.3	764.0
10°	736.4	740.6	751.4	763.0	774.9	784.8	790.0	794.2	795.8	796.4	794.8
12.5°	764.3	770.4	784.5	798.7	811.2	819.9	821.1	820.2	815.7	811.8	811.8
15°	798.7	804.1	819.9	835.3	847.5	849.1	841.1	835.9	830.5	829.5	829.5
17.5°	839.8	842.7	857.1	872.3	873.2	867.8	855.9	851.1	845.9	842.3	842.7
20°	887.6	886.7	897.0	903.3	896.7	880.0	861.9	853.9	848.8	844.6	844.9
22.5°	944.8	937.5	936.1	934.5	916.6	881.5	857.1	846.9	838.9	833.0	835.0
25°	1028.0	999.7	980.1	969.2	928.8	872.9	841.7	818.9	803.8	793.9	797.8
27.5°	1132.0	1084.4	1035.0	1008.4	928.8	855.2	804.4	767.5	742.8	732.6	737.7
30°	1231.2	1181.5	1108.5	1055.6	926.5	826.3	744.5	693.0	664.1	653.8	660.0
32.5°	1316.0	1261.8	1186.6	1107.3	921.1	779.4	669.9	613.1	585.2	572.9	579.0
35°	1394.7	1336.9	1265.0	1164.2	906.6	710.7	588.0	544.7	513.5	493.9	500.3
37.5°	1475.3	1406.6	1339.2	1215.5	880.6	630.4	525.1	488.1	451.5	425.2	432.2
40°	1563.0	1480.8	1418.5	1246.0	837.8	554.0	476.2	442.5	403.6	375.8	381.2
42.5°	1665.4	1569.8	1506.9	1261.8	779.4	499.7	444.4	411.4	374.7	352.0	356.5
45°	1772.4	1667.7	1587.4	1261.5	714.2	474.4	434.2	401.4	361.0	337.2	341.0
47.5°	1884.5	1770.2	1657.1	1240.9	657.7	477.9	428.4	379.9	335.3	312.1	315.4
50°	1996.9	1882.2	1724.6	1202.3	633.7	470.2	406.9	349.7	297.0	276.1	277.5
52.5°	2108.3	2001.4	1782.7	1147.5	609.3	441.6	379.2	310.6	281.4	266.9	266.9
55°	2220.4	2119.2	1845.9	1067.4	548.2	408.2	333.0	295.8	268.8	255.6	254.3
57.5°	2332.8	2255.4	1906.0	987.5	471.4	367.1	307.7	277.8	256.2	245.1	243.1
60°	2449.6	2411.1	1968.0	914.0	395.6	314.4	289.0	263.3	241.5	229.0	228.1
62.5°	2570.1	2582.6	2016.5	819.3	326.0	282.3	272.3	246.0	224.8	212.9	212.6
65°	2691.5	2748.0	2048.3	687.9	264.3	251.7	254.3	227.0	205.5	195.3	195.0
67.5°	2783.0	2867.1	2039.2	520.6	216.8	222.8	231.9	207.2	186.9	178.9	179.2
70°	2793.3	2853.1	1950.6	356.5	181.4	194.6	206.8	187.6	166.7	160.9	161.2
72.5°	2656.5	2660.4	1703.7	232.9	153.5	170.9	180.5	167.6	147.4	141.7	141.3
75°	2297.7	2200.2	1250.8	153.5	128.4	146.8	155.8	146.8	127.2	128.4	123.9
77.5°	1741.0	1558.2	759.5	109.2	107.2	123.3	135.5	129.1	112.4	126.2	111.1
80°	897.0	843.0	338.8	81.6	84.8	98.6	111.4	103.1	89.0	84.8	77.4
82.5°	205.5	238.9	133.6	58.4	61.3	70.9	85.1	77.4	63.9	53.9	53.3
85°	72.0	78.7	59.0	36.6	36.0	44.3	57.8	51.7	43.4	34.6	36.6
87.5°	22.8	29.8	22.1	14.8	15.4	19.9	26.6	24.4	20.2	13.1	13.8
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)