

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: P959836

Luminaire Tested: **NAV-SB1B-735-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959836
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-735-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4447.5 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

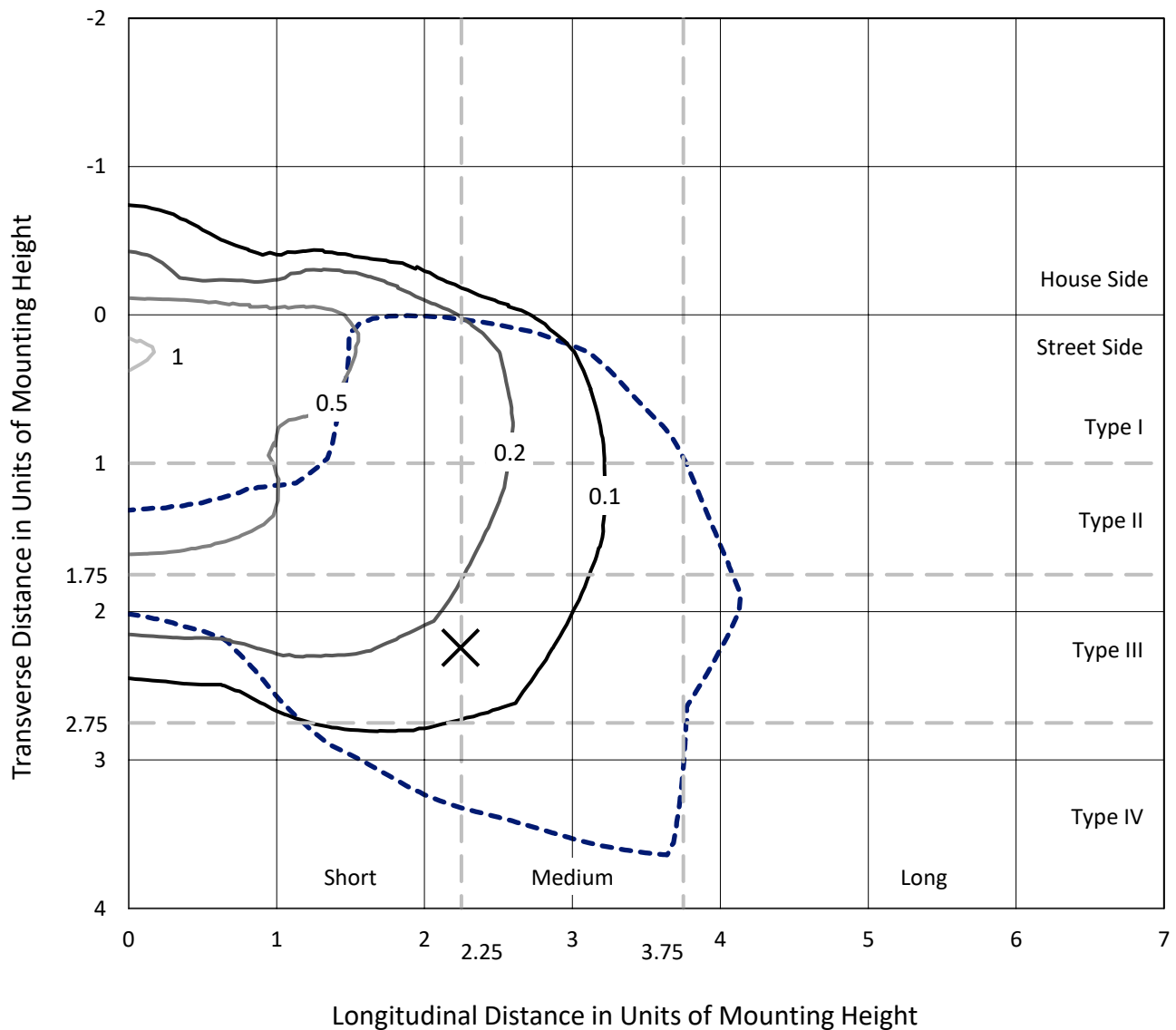
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P959836
CATALOG NUMBER: NAV-SB1B-735-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

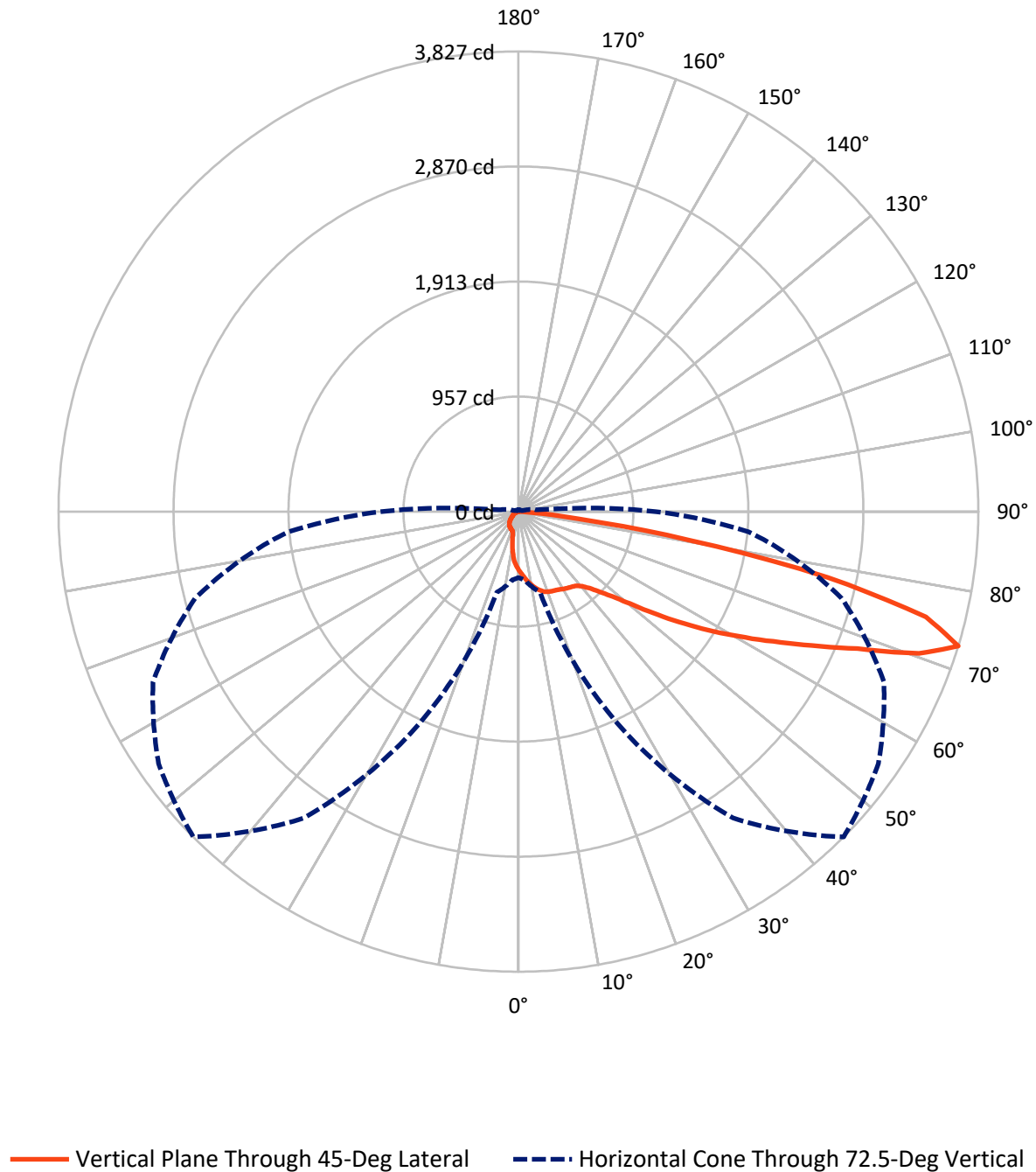
× Max cd
- - - 1/2 Max cd



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

REPORT NUMBER: P959836
CATALOG NUMBER: NAV-SB1B-735-U-T4W-HSS

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	467.3	0.0	467.3
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	3980.2	0.0	3980.2
	% Fixture	89.5	0.0	89.5
Total	Lumens	4447.5	0.0	4447.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.9	1.0
10°-20°	134.2	3.0
20°-30°	220.3	5.0
30°-40°	312.5	7.0
40°-50°	516.5	11.6
50°-60°	927.8	20.9
60°-70°	1288.3	29.0
70°-80°	934.5	21.0
80°-90°	67.6	1.5
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°	4447.5	100.0
0°-180°	4447.5	100.0

Coefficient of Utilization



REPORT NUMBER: P959836

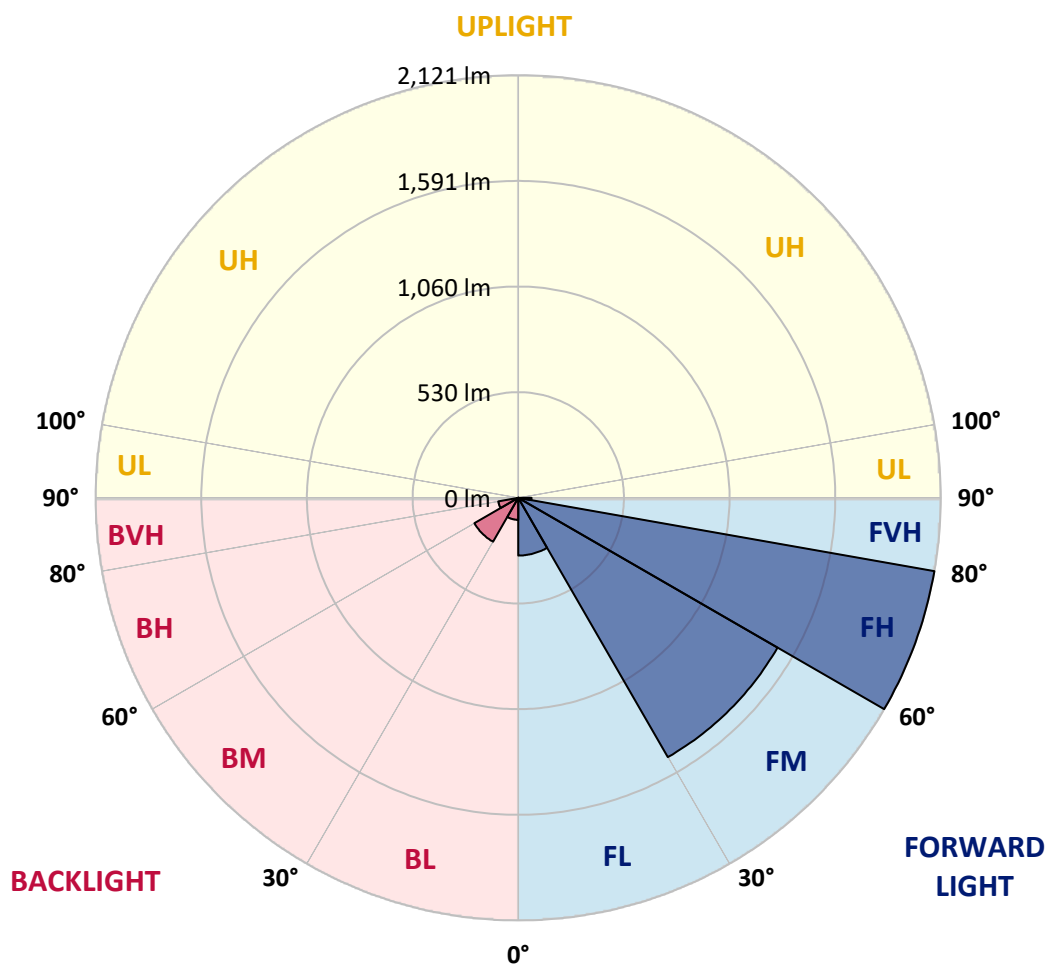
CATALOG NUMBER: NAV-SB1B-735-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	289.7	6.5			
FM	(30°-60°)	1502.6	33.8			
FH	(60°-80°)	2120.9	47.7			G2/5000
FVH	(80°-90°)	67.0	1.5			G1/100
BL	(0°-30°)	110.7	2.5	B1/500		
BM	(30°-60°)	254.1	5.7	B1/1000		
BH	(60°-80°)	101.9	2.3	B0/110		G0/110
BVH	(80°-90°)	0.6	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 IV Short



REPORT NUMBER: P959836

CATALOG NUMBER: NAV-SB1B-735-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2
2.5°	532.2	533.1	532.5	528.8	522.8	519.4	517.6	511.5	507.6	500.6	493.3
5°	581.1	584.7	582.5	575.2	563.8	555.6	553.1	540.7	529.4	516.4	501.2
7.5°	632.9	634.8	630.8	621.5	605.9	591.9	589.9	572.6	554.6	534.5	513.9
10°	677.8	680.0	673.9	660.3	642.7	625.4	622.3	603.2	582.0	557.4	530.9
12.5°	715.6	717.6	709.7	693.3	673.9	656.0	653.0	632.9	609.6	582.2	549.5
15°	744.0	748.0	737.4	719.8	698.8	680.9	679.4	659.7	636.9	606.5	571.6
17.5°	760.8	764.6	754.7	733.4	715.6	700.4	698.5	682.1	660.9	631.7	593.2
20°	763.5	767.1	756.4	738.0	723.1	710.9	710.0	698.2	682.8	654.8	616.5
22.5°	755.3	759.8	750.1	735.2	724.9	718.5	717.3	710.6	701.8	678.1	638.4
25°	746.8	750.4	743.1	730.1	724.6	724.1	724.9	723.8	721.9	701.8	663.9
27.5°	746.2	750.1	741.9	729.5	726.4	732.8	733.7	739.5	741.0	723.4	688.5
30°	751.3	754.1	746.2	733.1	731.6	746.2	746.5	756.8	759.2	741.6	712.8
32.5°	762.6	765.6	757.7	738.6	736.5	756.8	757.7	771.4	775.3	761.1	738.3
35°	788.9	792.6	783.5	753.8	746.2	766.8	769.6	785.7	793.6	781.7	764.6
37.5°	854.8	844.2	831.8	784.4	768.3	782.6	787.2	806.0	819.9	806.3	796.2
40°	1018.4	985.1	946.2	836.6	807.2	816.3	819.9	838.8	857.9	844.5	839.7
42.5°	1264.0	1224.6	1162.0	956.8	865.8	870.3	873.1	889.5	916.5	905.9	907.0
45°	1483.0	1468.7	1405.0	1162.0	975.4	952.9	956.2	964.7	1004.5	1000.6	1008.5
47.5°	1651.1	1643.0	1593.8	1397.6	1160.5	1054.0	1063.4	1067.3	1124.7	1138.7	1160.0
50°	1780.4	1777.5	1733.4	1607.1	1402.5	1203.0	1206.4	1197.9	1283.8	1318.4	1358.7
52.5°	1902.5	1912.8	1880.4	1801.6	1660.8	1398.2	1397.6	1357.6	1473.5	1525.7	1594.7
55°	2012.7	2016.3	2019.7	2000.2	1920.6	1620.4	1614.7	1549.1	1693.6	1747.6	1822.3
57.5°	2116.2	2117.8	2147.5	2187.2	2191.1	1859.0	1848.5	1769.8	1934.1	1972.6	2018.4
60°	2185.7	2192.7	2255.5	2366.0	2414.3	2105.2	2099.5	2019.4	2178.7	2196.7	2188.2
62.5°	2085.6	2128.0	2286.5	2505.7	2624.9	2378.2	2375.4	2300.2	2436.1	2421.6	2348.7
65°	1688.2	1760.1	2038.8	2600.1	2831.7	2682.9	2686.9	2606.8	2700.6	2653.2	2479.3
67.5°	1180.9	1256.8	1586.5	2607.7	3062.7	3040.9	3063.6	2938.0	2981.3	2875.1	2510.2
70°	816.6	855.8	1070.4	2444.3	3242.7	3533.9	3533.3	3344.8	3260.6	2976.2	2352.4
72.5°	549.2	569.5	695.2	1939.2	3110.4	3826.8	3809.2	3655.6	3354.7	2783.4	1921.9
75°	231.6	246.5	321.7	1089.8	2460.7	3501.1	3453.4	3230.6	2980.8	2191.8	1199.1
77.5°	73.5	79.8	126.9	390.1	1355.5	2631.7	2581.3	2017.5	1997.8	1099.5	438.4
80°	35.0	40.7	71.3	156.6	533.4	1431.3	1424.3	915.2	859.4	296.9	88.0
82.5°	15.2	17.9	39.5	83.7	238.6	510.7	520.9	311.5	257.7	112.6	27.1
85°	4.8	6.4	18.2	38.5	100.8	126.9	125.4	74.1	103.8	61.3	9.4
87.5°	0.0	0.0	6.0	8.8	10.4	7.3	8.2	6.4	28.8	17.0	3.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P959836

CATALOG NUMBER: NAV-SB1B-735-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2
2.5°	489.6	484.8	476.3	468.4	461.5	454.5	450.2	444.1	443.5	443.5	445.1
5°	493.0	485.1	470.0	453.9	435.3	417.7	400.1	383.1	377.6	373.7	375.6
7.5°	502.8	490.3	466.3	435.6	400.4	361.8	334.9	305.7	294.5	288.4	289.3
10°	516.7	499.7	463.2	409.5	352.4	299.9	261.4	229.8	217.7	212.5	212.5
12.5°	532.2	511.2	457.8	377.0	299.9	237.1	199.5	184.9	183.1	183.1	183.1
15°	550.6	525.2	448.3	338.8	245.0	187.6	174.2	174.9	176.7	177.9	177.9
17.5°	569.8	540.1	433.5	296.0	196.4	168.8	169.1	170.0	171.5	172.7	172.7
20°	590.4	554.9	413.8	250.4	168.5	163.3	164.2	165.1	166.4	167.0	167.3
22.5°	612.6	568.9	390.4	205.8	159.1	158.8	159.1	160.0	161.5	161.5	162.2
25°	636.3	584.4	363.7	173.3	154.3	154.3	154.8	155.4	156.6	156.6	156.9
27.5°	660.6	598.6	335.5	156.3	150.0	149.6	149.6	150.6	151.2	151.5	151.8
30°	687.3	615.3	307.2	152.7	146.6	145.1	144.2	144.8	145.4	145.8	146.4
32.5°	714.6	631.4	282.0	154.3	143.3	140.5	137.6	136.9	136.9	138.2	139.0
35°	745.0	649.0	262.6	159.4	141.4	133.9	129.0	126.3	126.6	128.4	129.4
37.5°	781.4	670.2	248.4	163.9	140.2	126.3	118.4	115.0	113.0	115.0	114.5
40°	829.0	701.5	238.0	167.6	138.7	117.5	106.9	101.4	97.5	98.7	98.1
42.5°	899.1	750.7	234.0	167.9	135.4	107.1	95.0	87.7	82.0	82.3	81.1
45°	997.5	828.4	254.4	163.9	128.1	95.9	82.6	72.9	69.2	68.3	67.1
47.5°	1132.3	941.7	301.5	155.7	117.5	85.0	70.4	62.2	59.4	58.0	57.1
50°	1312.9	1087.1	353.6	146.6	106.9	74.7	60.4	55.2	53.4	51.9	51.6
52.5°	1522.4	1234.6	396.5	137.6	96.2	65.6	54.0	51.0	49.5	48.3	48.0
55°	1714.5	1336.3	394.0	127.8	85.9	58.3	49.5	47.7	45.8	44.6	44.0
57.5°	1834.1	1350.5	324.8	117.2	74.1	52.5	45.2	44.0	41.9	40.4	40.1
60°	1889.1	1269.3	227.7	103.2	62.2	47.0	40.7	40.1	37.3	35.3	34.6
62.5°	1899.1	1118.1	151.8	85.9	51.9	41.9	36.1	35.3	31.6	27.9	26.1
65°	1858.4	901.9	105.1	67.1	44.3	36.4	31.0	29.1	25.2	21.5	20.3
67.5°	1729.8	633.2	73.2	48.3	37.6	28.8	24.6	24.0	20.9	17.9	17.0
70°	1493.8	360.9	48.9	36.1	29.7	19.8	19.5	20.0	17.0	14.6	13.3
72.5°	1145.3	165.1	30.3	26.4	20.3	13.3	15.5	15.8	13.0	11.0	9.7
75°	674.2	70.7	19.2	17.0	10.4	8.8	11.3	11.6	8.8	7.0	6.0
77.5°	229.5	26.8	12.1	10.0	5.1	4.8	7.3	7.3	4.8	2.8	2.2
80°	52.2	10.0	6.0	4.0	2.5	2.2	2.5	2.2	1.2	0.3	0.0
82.5°	14.9	4.0	2.5	1.5	0.9	0.9	0.3	0.0	0.0	0.0	0.0
85°	4.2	1.8	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.8	0.3	0.0	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)