

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: P881900

Luminaire Tested: **NAV-SB1C-735-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881900  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1C-735-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 3500K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD  
THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

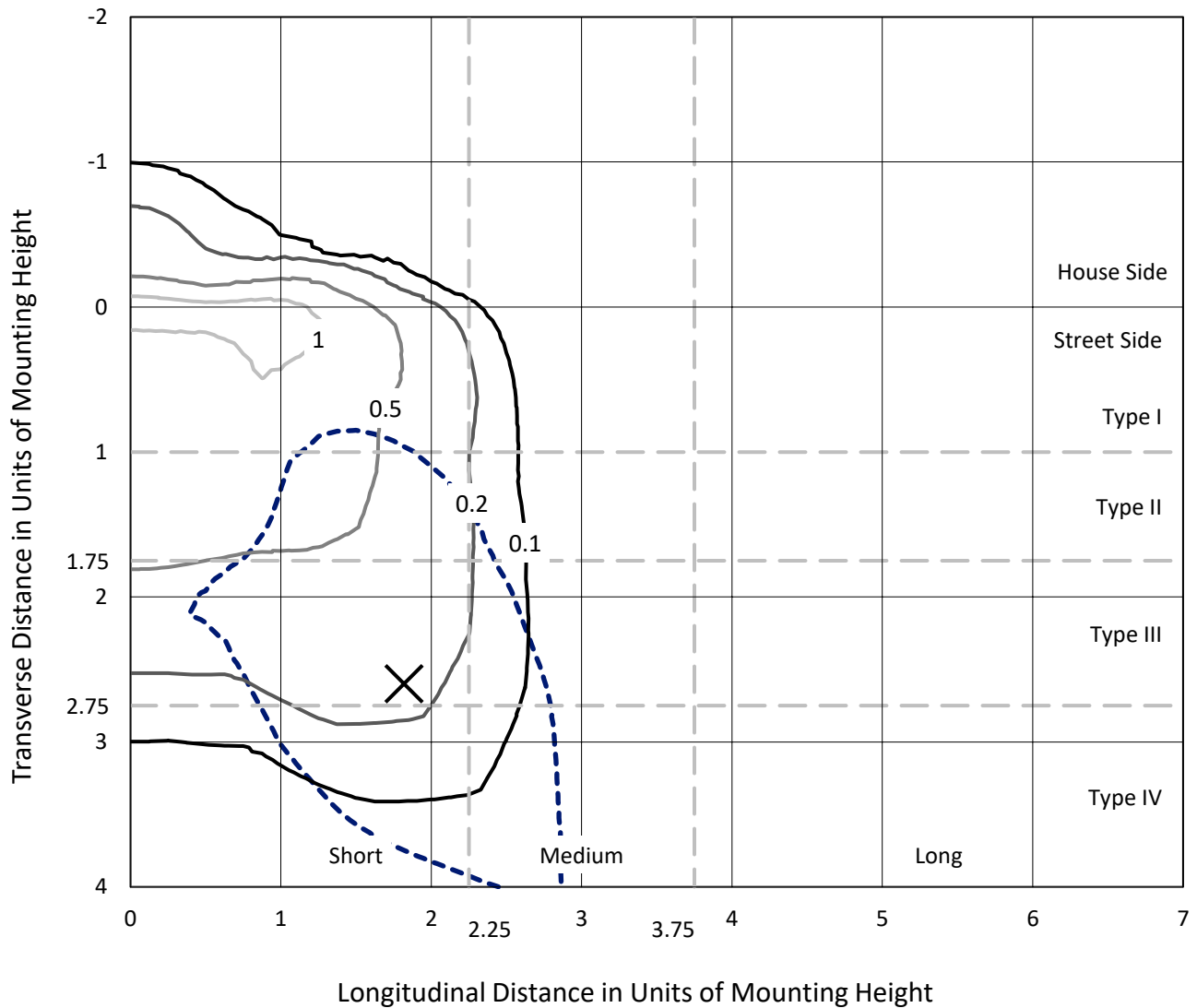
Lumens per Lamp: N/A  
Luminaire Lumens: 5675 lumens  
Efficiency: N/A  
Efficacy: 104.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 54.4  
Input Voltage (V): 120.0  
Input Current (Ain): 0.437  
Voltage Rise (V): NR  
Power Factor: 0.993  
Total Harmonic Distortion (THDi): 9.314  
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

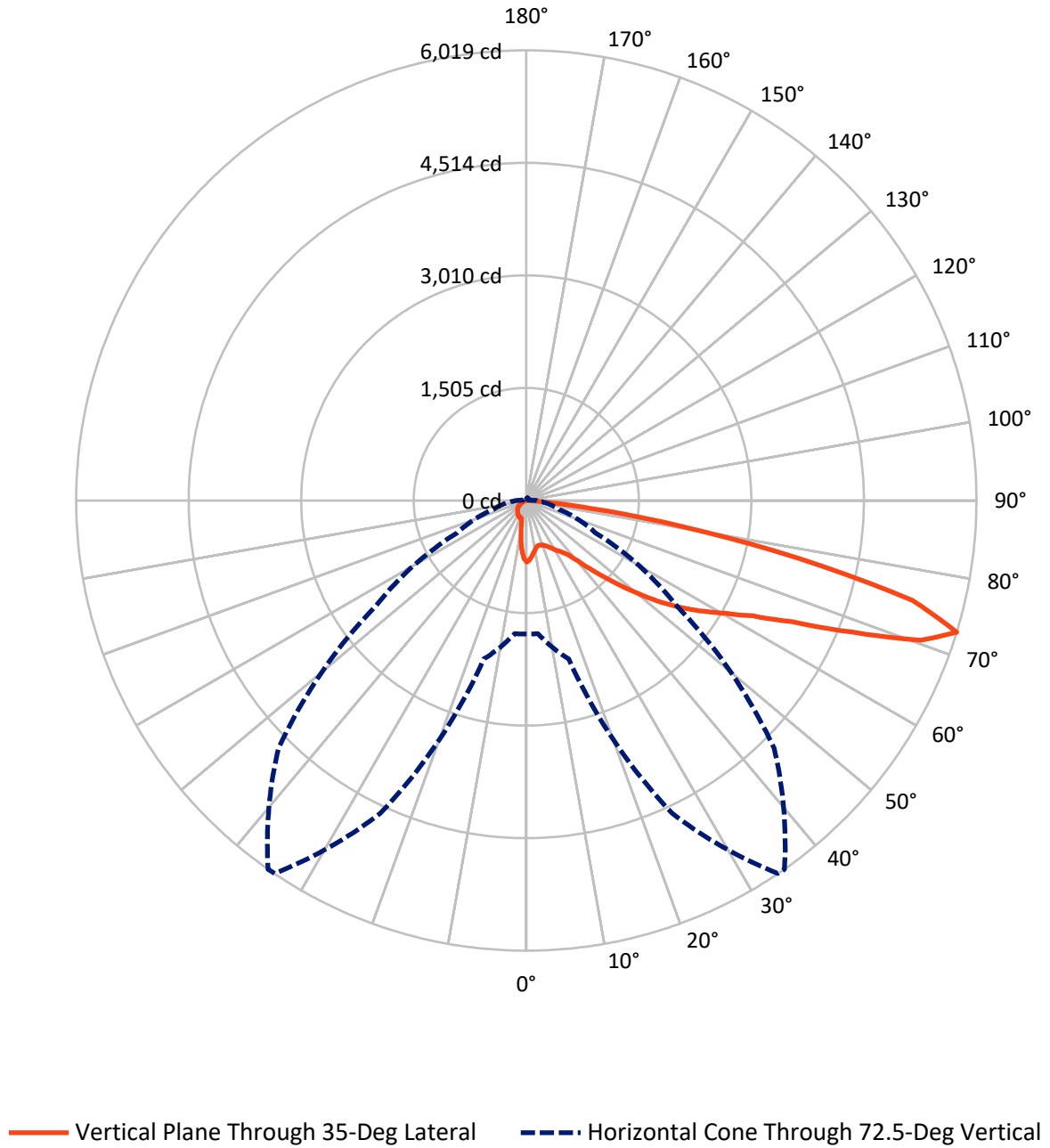
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	638.7	0.0	638.7
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	5036.3	0.0	5036.3
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	5675.0	0.0	5675.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.6	1.2
10°-20°	158.1	2.8
20°-30°	256.9	4.5
30°-40°	428.6	7.6
40°-50°	810.8	14.3
50°-60°	1288.4	22.7
60°-70°	1593.8	28.1
70°-80°	990.7	17.5
80°-90°	80.1	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°	5675.0	100.0
0°-180°	5675.0	100.0

**Coefficient of Utilization**



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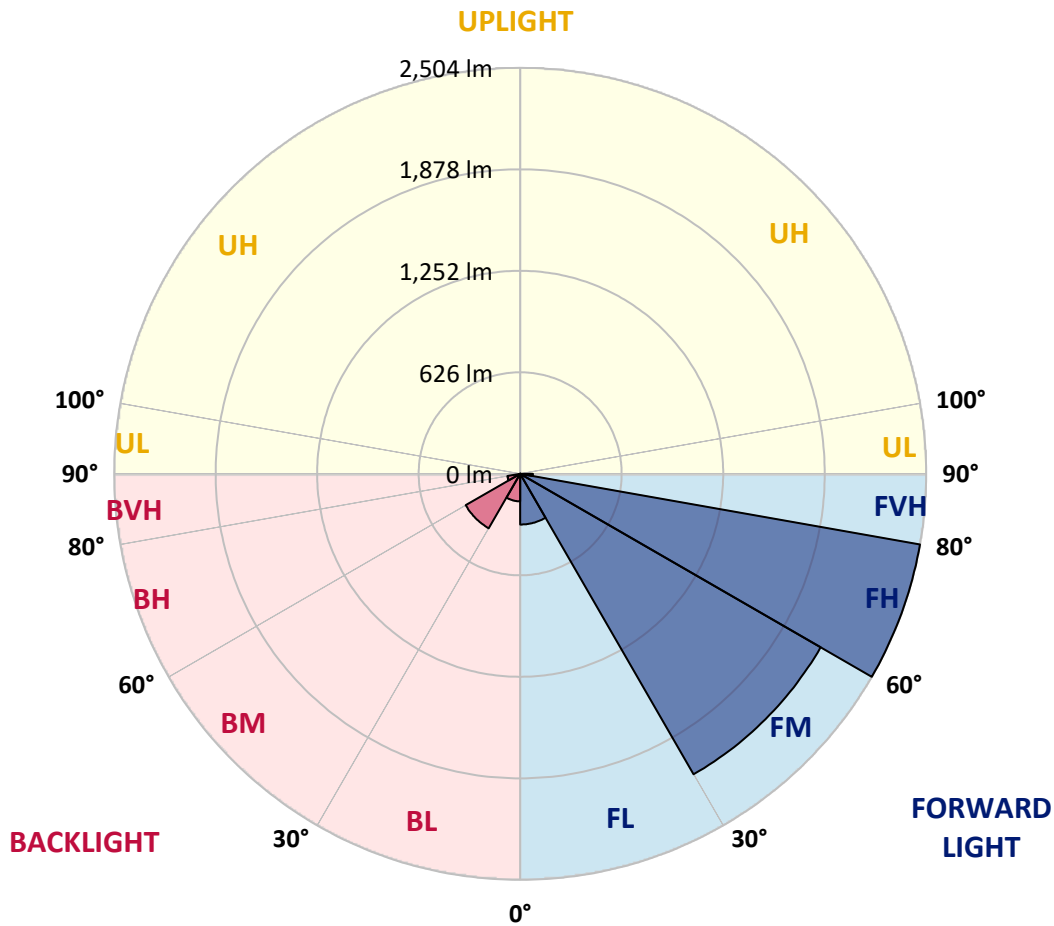
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	312.8	5.5			
FM (30°-60°)	2140.1	37.7			
FH (60°-80°)	2504.5	44.1			G2/5000
FVH (80°-90°)	79.0	1.4			G1/100
BL (0°-30°)	169.7	3.0	B1/500		
BM (30°-60°)	387.7	6.8	B1/1000		
BH (60°-80°)	80.1	1.4	B0/110		G0/110
BVH (80°-90°)	1.1	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



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	822.5	822.5	822.5	822.5	822.5	822.5	822.5	822.5	822.5	822.5	822.5
2.5°	785.9	792.6	793.8	795.9	795.9	798.4	802.5	808.4	817.9	822.9	826.2
5°	724.4	729.4	735.6	740.6	750.1	751.4	767.6	783.4	805.4	822.1	833.7
7.5°	662.4	668.2	676.5	688.6	701.1	704.8	729.4	756.0	790.9	822.1	841.6
10°	618.7	619.2	626.6	638.7	658.7	663.2	693.2	731.0	774.7	817.1	849.1
12.5°	594.2	597.1	600.4	609.6	628.7	631.6	663.7	708.1	758.5	814.2	857.8
15°	594.2	596.3	598.4	602.9	618.3	620.8	649.1	693.6	750.1	815.4	872.0
17.5°	600.4	603.8	602.1	607.5	623.7	625.4	650.3	689.4	749.7	823.3	893.6
20°	615.4	617.9	614.6	617.9	634.1	637.5	663.2	697.3	756.8	837.1	920.6
22.5°	639.1	640.4	632.5	635.0	651.6	655.8	685.7	719.8	773.8	859.1	956.8
25°	669.1	671.6	659.5	662.4	678.2	683.2	717.7	753.5	800.9	889.4	1003.0
27.5°	703.6	704.8	694.4	694.0	714.4	721.5	756.4	795.1	837.1	927.7	1061.2
30°	743.1	746.8	736.8	735.2	761.0	766.8	801.3	846.2	890.3	985.1	1143.9
32.5°	774.3	777.2	771.4	775.5	801.7	806.3	855.8	918.6	973.9	1066.6	1256.6
35°	819.2	820.8	807.5	815.0	845.0	856.6	930.2	1020.0	1079.1	1168.9	1403.8
37.5°	981.8	981.8	925.2	888.2	916.9	927.3	1032.1	1147.7	1208.8	1306.1	1589.3
40°	1206.7	1203.0	1120.2	1044.5	1040.8	1061.2	1177.2	1308.6	1376.4	1470.8	1798.0
42.5°	1446.6	1440.8	1328.1	1253.3	1240.8	1247.9	1344.8	1506.9	1576.0	1671.6	2022.6
45°	1659.5	1657.9	1554.8	1454.1	1431.7	1454.1	1553.9	1739.0	1788.5	1889.1	2246.7
47.5°	1837.9	1837.9	1762.7	1697.0	1685.3	1698.6	1837.1	1996.4	1991.8	2120.7	2465.0
50°	2043.4	2041.7	1970.2	1941.9	1954.0	1972.7	2163.1	2267.5	2202.2	2348.2	2660.0
52.5°	2187.2	2197.2	2172.7	2168.1	2229.6	2262.1	2494.1	2532.8	2390.6	2564.0	2806.0
55°	2301.2	2312.8	2341.1	2373.1	2491.6	2534.0	2814.7	2784.4	2548.2	2751.1	2890.0
57.5°	2462.5	2445.9	2489.5	2552.7	2744.4	2795.6	3125.3	3021.8	2675.0	2902.9	2899.1
60°	2658.4	2660.9	2668.3	2748.2	2996.8	3062.5	3431.4	3246.3	2756.5	2996.0	2797.7
62.5°	2893.7	2897.5	2912.8	3035.5	3335.7	3397.7	3757.4	3430.1	2793.9	2969.8	2535.7
65°	2877.5	2893.3	3065.0	3484.6	3850.9	3912.1	4137.9	3559.0	2737.4	2730.3	2064.6
67.5°	2621.3	2647.1	2934.5	4021.0	4627.7	4695.9	4597.8	3584.4	2493.3	2123.2	1346.9
70°	2285.4	2294.5	2640.1	4503.4	5527.1	5596.1	5009.4	3305.4	1892.0	1184.3	603.4
72.5°	1784.7	1786.8	2192.2	4615.2	6015.3	6019.0	4686.3	2453.8	1017.5	454.9	209.6
75°	1274.9	1262.4	1468.3	3742.8	5292.2	5334.6	3513.3	1151.0	388.8	215.0	104.4
77.5°	683.6	697.3	830.8	2219.7	3655.9	3728.3	1916.9	331.8	197.9	146.4	69.0
80°	211.2	222.9	340.6	1016.3	2070.8	2114.5	710.6	147.6	138.1	104.4	45.3
82.5°	66.5	69.0	158.8	427.1	859.5	879.5	205.8	83.6	94.4	69.0	26.6
85°	19.1	19.5	70.7	159.3	212.5	216.6	57.8	32.4	54.1	42.8	13.7
87.5°	2.1	6.7	26.6	26.6	18.7	18.3	6.2	7.1	15.4	5.4	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°	822.5	822.5	822.5	822.5	822.5	822.5	822.5	822.5	822.5	822.5	822.5
2.5°	824.2	824.6	819.2	810.0	800.0	791.7	781.3	773.0	767.2	765.5	768.4
5°	830.0	827.1	811.7	783.8	750.6	721.9	689.9	664.5	647.9	640.8	643.3
7.5°	838.7	830.4	796.7	741.8	678.2	621.7	564.3	519.8	491.5	477.4	479.4
10°	846.2	829.6	771.8	681.1	583.8	498.2	420.8	367.2	337.2	323.1	323.5
12.5°	853.3	829.2	739.3	609.2	477.4	372.6	300.6	274.0	265.7	262.8	262.0
15°	866.6	830.4	698.6	526.8	371.3	281.5	255.3	254.9	256.6	255.7	255.3
17.5°	884.9	831.6	652.4	439.5	286.5	248.2	247.0	250.7	253.2	252.0	251.6
20°	908.6	836.6	603.4	353.0	246.2	239.9	242.8	246.2	248.2	246.2	245.8
22.5°	941.8	845.4	549.7	283.6	233.3	234.9	237.4	241.2	243.3	240.3	239.9
25°	982.6	859.1	496.9	246.6	227.0	229.1	232.9	237.0	239.5	236.6	236.2
27.5°	1035.4	881.1	448.3	238.3	220.8	222.0	227.5	233.7	237.0	233.3	233.3
30°	1111.9	917.3	406.3	242.0	217.1	214.1	221.6	230.4	234.1	230.8	230.4
32.5°	1213.4	968.5	380.5	247.8	215.4	205.0	212.1	223.3	229.5	227.5	227.5
35°	1346.4	1046.2	370.5	254.5	214.1	195.4	200.4	212.5	223.3	225.4	225.4
37.5°	1507.8	1154.3	373.4	257.4	210.4	187.5	190.0	200.4	214.6	221.2	222.9
40°	1691.2	1280.3	390.0	254.5	206.2	180.9	181.3	189.2	201.7	211.7	215.0
42.5°	1880.4	1427.5	420.8	243.7	202.5	175.1	173.8	179.2	187.5	194.6	197.5
45°	2060.4	1578.9	451.2	228.7	197.9	169.2	166.3	168.4	170.1	173.0	174.6
47.5°	2217.6	1685.3	442.4	215.0	191.7	162.6	157.6	156.8	151.8	151.4	150.9
50°	2326.1	1708.6	393.0	201.3	182.5	155.1	147.2	142.2	133.5	129.3	129.7
52.5°	2360.6	1616.7	321.0	187.5	167.6	145.1	133.9	126.0	115.2	111.4	111.0
55°	2314.9	1436.7	256.6	170.9	146.8	131.8	119.3	108.9	100.2	95.6	95.6
57.5°	2203.0	1207.5	202.9	151.4	124.7	116.8	104.4	94.0	86.5	81.9	81.1
60°	2017.6	958.9	160.5	128.1	106.5	100.6	87.7	81.1	74.4	69.0	67.8
62.5°	1736.1	684.4	126.0	101.5	89.0	82.3	74.8	69.9	62.0	54.5	53.2
65°	1354.8	418.7	97.3	74.4	71.5	68.2	63.6	59.0	49.5	42.0	40.8
67.5°	854.5	198.3	69.4	56.1	56.6	54.9	52.8	49.1	42.0	35.3	34.5
70°	376.3	96.1	45.7	42.8	42.0	42.0	43.7	42.4	35.8	29.5	28.3
72.5°	128.1	51.6	34.1	32.4	30.4	29.9	36.6	35.3	28.7	22.9	21.6
75°	66.9	34.5	24.9	23.3	18.3	22.0	29.1	27.4	20.4	15.0	13.7
77.5°	43.7	24.5	17.0	15.0	10.4	14.6	21.6	19.1	12.1	7.5	6.7
80°	27.4	16.2	10.0	7.1	5.0	7.9	11.6	8.3	4.6	1.7	1.2
82.5°	14.6	8.3	3.7	2.5	2.1	2.5	2.9	2.1	0.8	0.0	0.0
85°	5.8	2.9	1.2	0.8	0.4	0.0	0.8	0.4	0.0	0.0	0.0
87.5°	2.1	0.4	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)