

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: P881960

Luminaire Tested: **NAV-SB1C-835-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881960  
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-835-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3500K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD  
THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

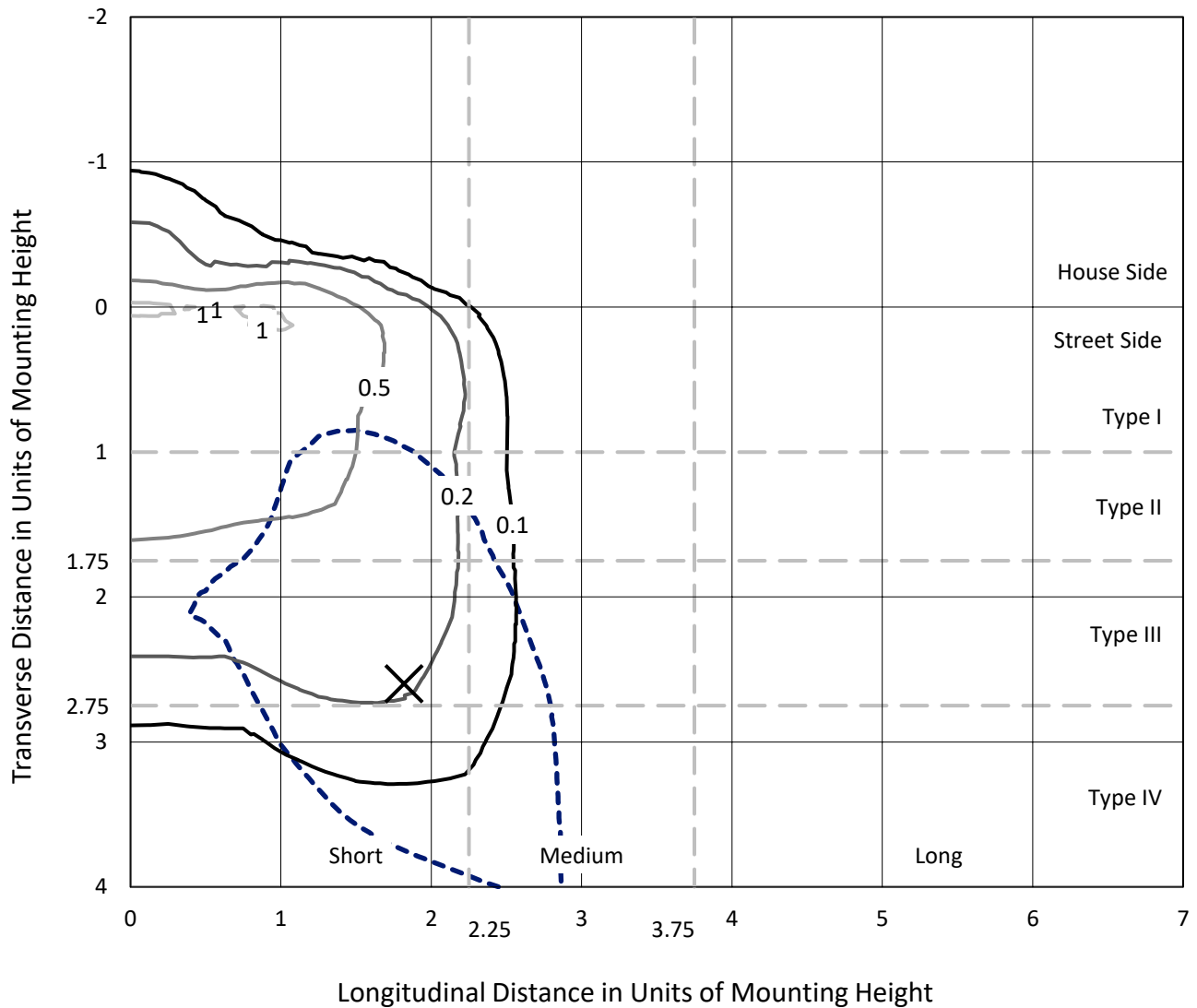
Lumens per Lamp: N/A  
Luminaire Lumens: 4788 lumens  
Efficiency: N/A  
Efficacy: 88.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 54.4  
Input Voltage (V): 120.0  
Input Current (Ain): 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

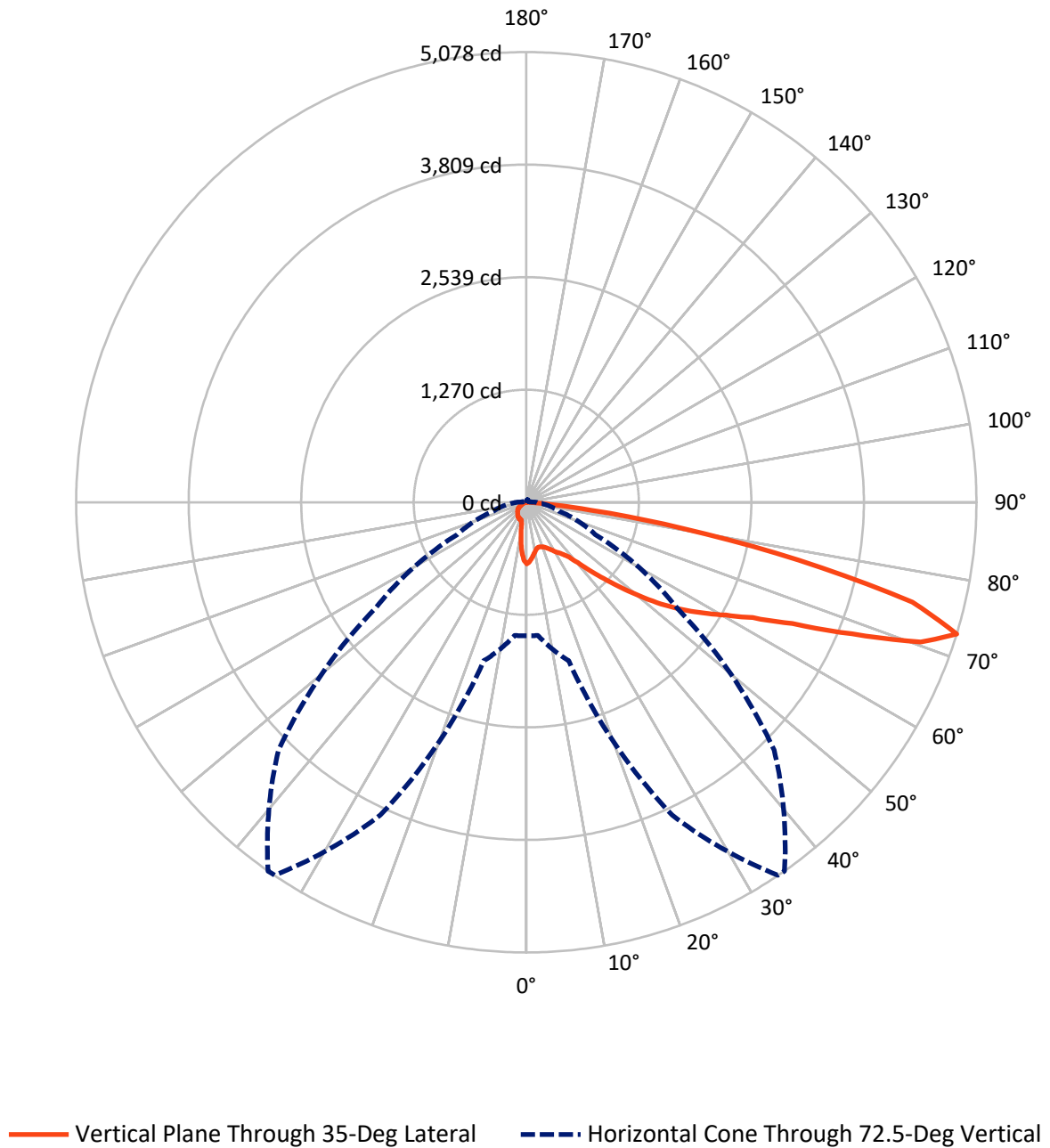
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 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	538.9	0.0	538.9
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	4249.1	0.0	4249.1
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	4788.0	0.0	4788.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.0	1.2
10°-20°	133.4	2.8
20°-30°	216.7	4.5
30°-40°	361.6	7.6
40°-50°	684.1	14.3
50°-60°	1087.0	22.7
60°-70°	1344.7	28.1
70°-80°	835.9	17.5
80°-90°	67.6	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°	4788.0	100.0
0°-180°	4788.0	100.0

**Coefficient of Utilization**



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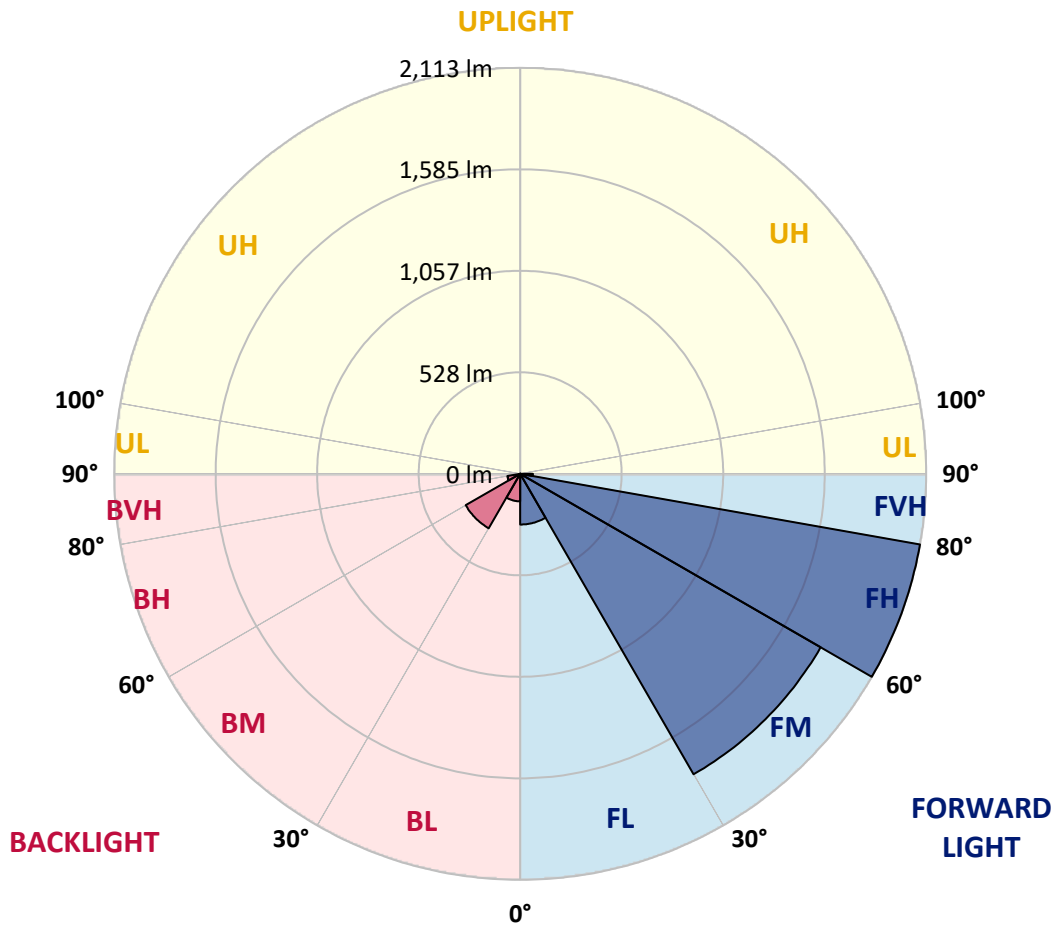
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	263.9	5.5			
FM (30°-60°)	1805.6	37.7			
FH (60°-80°)	2113.0	44.1			G2/5000
FVH (80°-90°)	66.6	1.4			G1/100
BL (0°-30°)	143.2	3.0	B1/500		
BM (30°-60°)	327.1	6.8	B1/1000		
BH (60°-80°)	67.6	1.4	B0/110		G0/110
BVH (80°-90°)	0.9	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°	693.9	693.9	693.9	693.9	693.9	693.9	693.9	693.9	693.9	693.9	693.9
2.5°	663.1	668.7	669.7	671.5	671.5	673.6	677.1	682.0	690.1	694.3	697.1
5°	611.1	615.4	620.6	624.8	632.9	633.9	647.6	661.0	679.6	693.6	703.4
7.5°	558.9	563.8	570.8	581.0	591.5	594.7	615.4	637.8	667.3	693.6	710.1
10°	522.0	522.4	528.7	538.9	555.7	559.6	584.8	616.8	653.6	689.4	716.4
12.5°	501.3	503.8	506.6	514.3	530.5	532.9	559.9	597.5	639.9	686.9	723.8
15°	501.3	503.1	504.8	508.7	521.7	523.8	547.6	585.2	632.9	688.0	735.7
17.5°	506.6	509.4	508.0	512.6	526.2	527.6	548.7	581.7	632.5	694.6	753.9
20°	519.2	521.3	518.5	521.3	535.0	537.8	559.6	588.3	638.5	706.2	776.7
22.5°	539.2	540.3	533.6	535.7	549.8	553.3	578.5	607.3	652.9	724.8	807.3
25°	564.5	566.6	556.4	558.9	572.2	576.4	605.5	635.7	675.7	750.4	846.2
27.5°	593.6	594.7	585.9	585.5	602.7	608.7	638.2	670.8	706.2	782.7	895.3
30°	626.9	630.1	621.7	620.3	642.0	646.9	676.0	713.9	751.1	831.1	965.1
32.5°	653.2	655.7	650.8	654.3	676.4	680.3	722.0	775.0	821.6	899.9	1060.2
35°	691.1	692.5	681.3	687.6	712.9	722.7	784.8	860.6	910.4	986.2	1184.4
37.5°	828.3	828.3	780.6	749.4	773.6	782.4	870.8	968.3	1019.9	1102.0	1340.9
40°	1018.1	1015.0	945.1	881.3	878.1	895.3	993.2	1104.1	1161.2	1240.9	1517.0
42.5°	1220.5	1215.6	1120.6	1057.4	1046.9	1052.8	1134.6	1271.4	1329.6	1410.3	1706.4
45°	1400.2	1398.8	1311.8	1226.9	1207.9	1226.9	1311.1	1467.2	1508.9	1593.8	1895.5
47.5°	1550.7	1550.7	1487.2	1431.7	1421.9	1433.1	1550.0	1684.3	1680.5	1789.2	2079.7
50°	1724.0	1722.6	1662.2	1638.4	1648.6	1664.3	1825.0	1913.1	1858.0	1981.1	2244.3
52.5°	1845.4	1853.8	1833.1	1829.2	1881.2	1908.5	2104.3	2136.9	2016.9	2163.2	2367.4
55°	1941.5	1951.3	1975.2	2002.2	2102.2	2138.0	2374.8	2349.2	2149.9	2321.1	2438.3
57.5°	2077.6	2063.6	2100.4	2153.7	2315.5	2358.6	2636.8	2549.5	2256.9	2449.1	2446.0
60°	2242.9	2245.0	2251.3	2318.6	2528.4	2583.9	2895.0	2738.9	2325.7	2527.7	2360.4
62.5°	2441.4	2444.6	2457.6	2561.1	2814.4	2866.6	3170.1	2894.0	2357.2	2505.6	2139.4
65°	2427.7	2441.1	2586.0	2940.0	3249.0	3300.6	3491.1	3002.8	2309.5	2303.5	1741.9
67.5°	2211.6	2233.4	2475.8	3392.5	3904.4	3961.9	3879.1	3024.2	2103.6	1791.3	1136.3
70°	1928.2	1935.9	2227.4	3799.5	4663.2	4721.5	4226.4	2788.7	1596.3	999.2	509.1
72.5°	1505.8	1507.5	1849.6	3893.9	5075.1	5078.3	3953.9	2070.2	858.5	383.8	176.8
75°	1075.6	1065.1	1238.8	3157.8	4465.0	4500.8	2964.2	971.1	328.0	181.4	88.1
77.5°	576.8	588.3	701.0	1872.7	3084.5	3145.5	1617.3	280.0	167.0	123.5	58.2
80°	178.2	188.0	287.3	857.4	1747.1	1784.0	599.6	124.5	116.5	88.1	38.2
82.5°	56.1	58.2	134.0	360.3	725.2	742.0	173.7	70.5	79.6	58.2	22.5
85°	16.1	16.5	59.6	134.4	179.3	182.8	48.8	27.4	45.6	36.1	11.6
87.5°	1.8	5.6	22.5	22.5	15.8	15.4	5.3	6.0	13.0	4.6	2.1
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°	693.9	693.9	693.9	693.9	693.9	693.9	693.9	693.9	693.9	693.9	693.9
2.5°	695.3	695.7	691.1	683.4	675.0	668.0	659.2	652.2	647.3	645.9	648.3
5°	700.3	697.8	684.8	661.3	633.2	609.0	582.0	560.6	546.6	540.6	542.7
7.5°	707.6	700.6	672.2	625.9	572.2	524.5	476.1	438.5	414.7	402.8	404.5
10°	713.9	699.9	651.1	574.7	492.6	420.3	355.0	309.8	284.5	272.6	272.9
12.5°	719.9	699.6	623.8	514.0	402.8	314.3	253.7	231.2	224.2	221.7	221.0
15°	731.1	700.6	589.4	444.5	313.3	237.5	215.4	215.1	216.5	215.8	215.4
17.5°	746.6	701.7	550.5	370.8	241.7	209.4	208.4	211.6	213.7	212.6	212.3
20°	766.6	705.9	509.1	297.9	207.7	202.4	204.9	207.7	209.4	207.7	207.3
22.5°	794.6	713.2	463.8	239.3	196.8	198.2	200.3	203.5	205.2	202.8	202.4
25°	829.0	724.8	419.2	208.0	191.6	193.3	196.5	200.0	202.1	199.6	199.3
27.5°	873.6	743.4	378.2	201.0	186.3	187.3	191.9	197.2	200.0	196.8	196.8
30°	938.1	773.9	342.8	204.2	183.1	180.7	187.0	194.4	197.5	194.7	194.4
32.5°	1023.7	817.1	321.0	209.1	181.7	173.0	178.9	188.4	193.7	191.9	191.9
35°	1136.0	882.7	312.6	214.7	180.7	164.9	169.1	179.3	188.4	190.1	190.1
37.5°	1272.1	973.9	315.0	217.2	177.5	158.2	160.3	169.1	181.0	186.6	188.0
40°	1426.8	1080.2	329.1	214.7	174.0	152.6	153.0	159.6	170.2	178.6	181.4
42.5°	1586.5	1204.4	355.0	205.6	170.9	147.7	146.6	151.2	158.2	164.2	166.6
45°	1738.4	1332.1	380.7	193.0	167.0	142.8	140.3	142.1	143.5	145.9	147.3
47.5°	1871.0	1421.9	373.3	181.4	161.7	137.2	133.0	132.3	128.1	127.7	127.4
50°	1962.5	1441.6	331.5	169.8	154.0	130.9	124.2	120.0	112.6	109.1	109.5
52.5°	1991.7	1364.0	270.8	158.2	141.4	122.4	113.0	106.3	97.2	94.0	93.7
55°	1953.1	1212.1	216.5	144.2	123.8	111.2	100.7	91.9	84.6	80.7	80.7
57.5°	1858.7	1018.8	171.2	127.7	105.2	98.6	88.1	79.3	73.0	69.1	68.4
60°	1702.2	809.0	135.4	108.1	89.8	84.9	74.0	68.4	62.8	58.2	57.2
62.5°	1464.7	577.5	106.3	85.6	75.1	69.5	63.1	58.9	52.3	46.0	44.9
65°	1143.0	353.3	82.1	62.8	60.3	57.5	53.7	49.8	41.7	35.4	34.4
67.5°	721.0	167.3	58.6	47.4	47.7	46.3	44.6	41.4	35.4	29.8	29.1
70°	317.5	81.0	38.6	36.1	35.4	35.4	36.8	35.8	30.2	24.9	23.9
72.5°	108.1	43.5	28.8	27.4	25.6	25.3	30.9	29.8	24.2	19.3	18.2
75°	56.5	29.1	21.0	19.6	15.4	18.6	24.6	23.2	17.2	12.6	11.6
77.5°	36.8	20.7	14.4	12.6	8.8	12.3	18.2	16.1	10.2	6.3	5.6
80°	23.2	13.7	8.4	6.0	4.2	6.7	9.8	7.0	3.9	1.4	1.1
82.5°	12.3	7.0	3.2	2.1	1.8	2.1	2.5	1.8	0.7	0.0	0.0
85°	4.9	2.5	1.1	0.7	0.4	0.0	0.7	0.4	0.0	0.0	0.0
87.5°	1.8	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)