

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: P961406

Luminaire Tested: **NAV-SB2A-735-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961406
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-735-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7784.9 lumens
Efficiency: N/A
Efficacy: 135.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

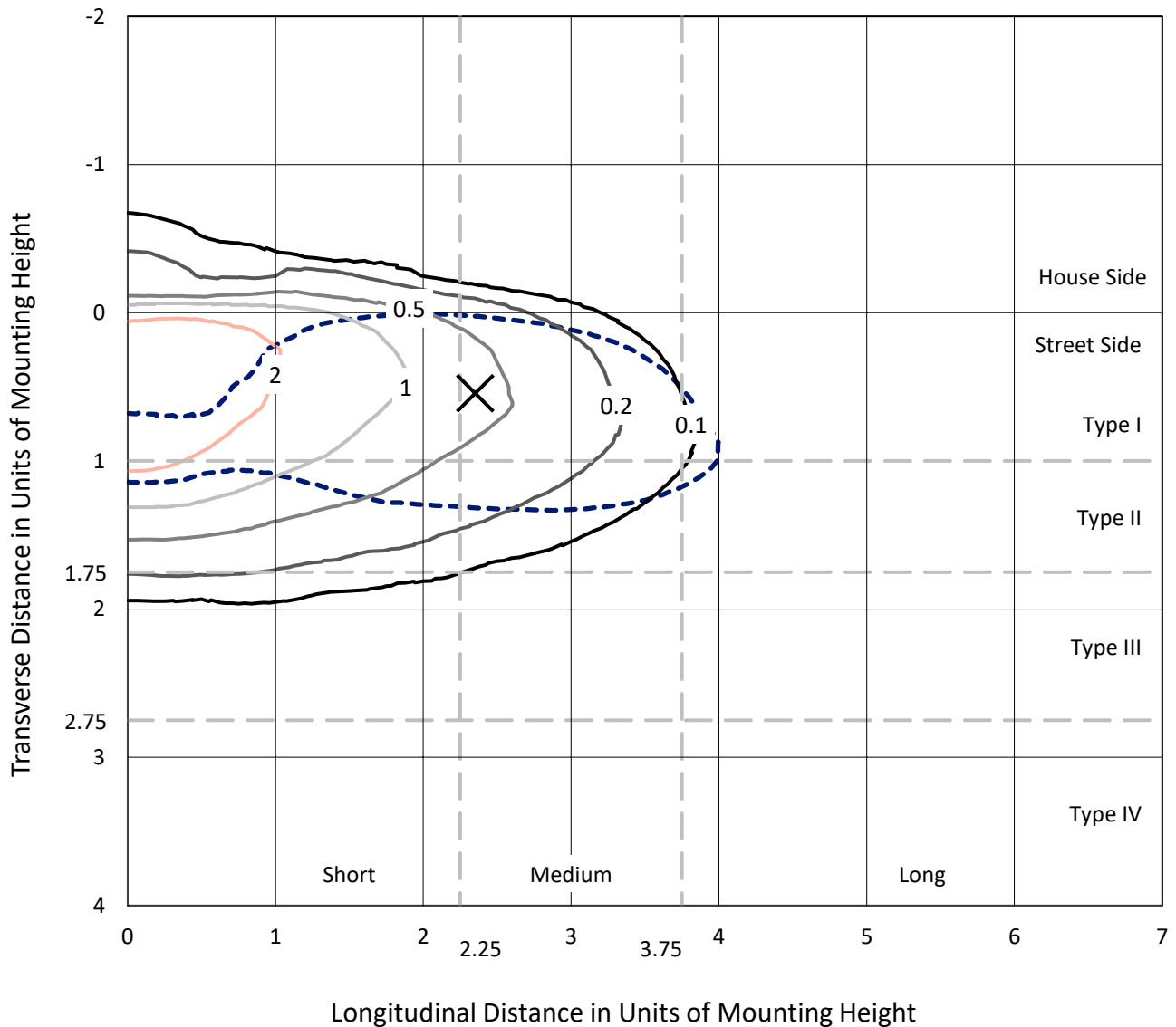
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

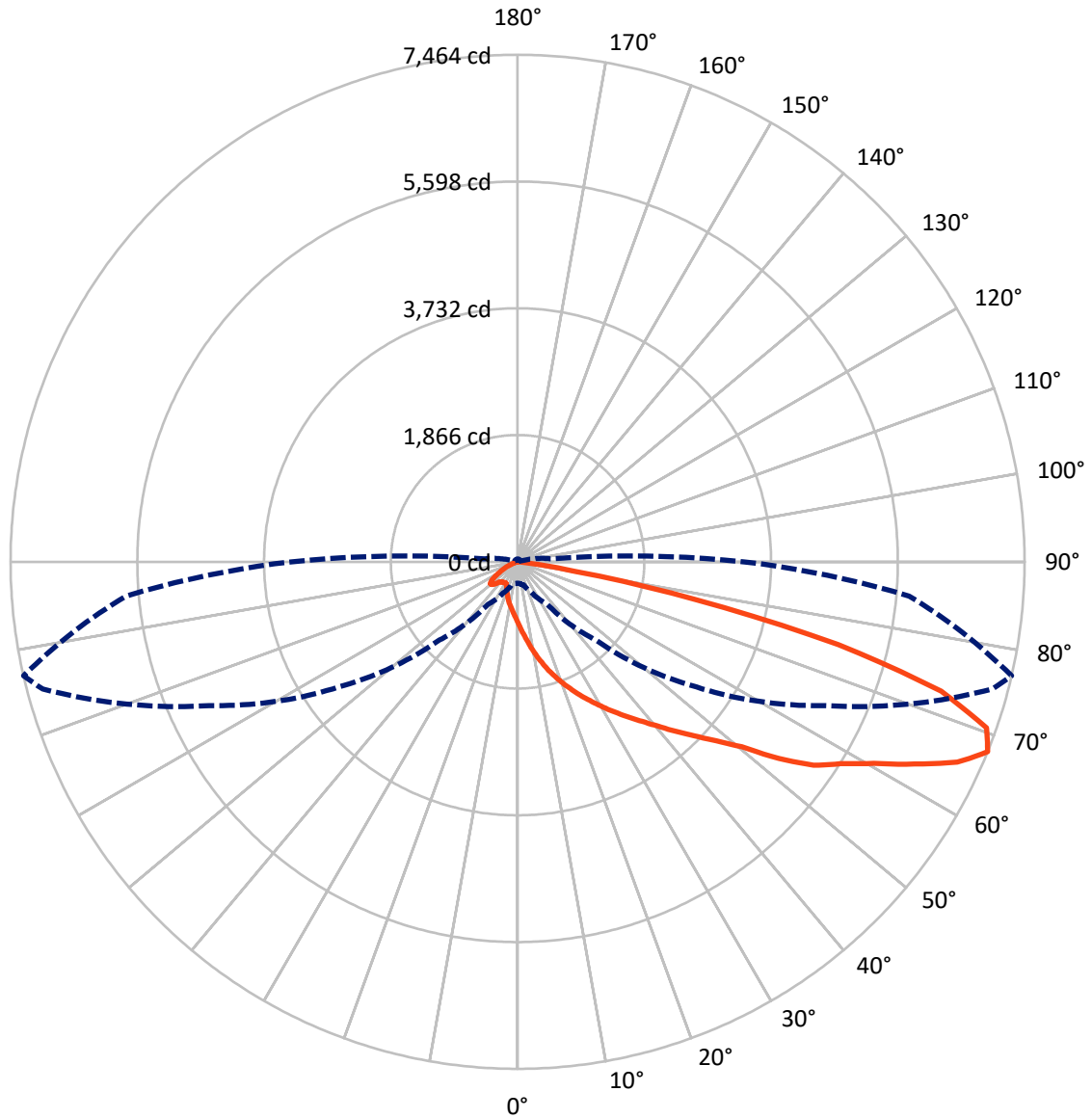
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	572.7	0.0	572.7
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	7212.1	0.0	7212.1
	% Fixture	92.6	0.0	92.6
Total	Lumens	7784.9	0.0	7784.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.6	1.2
10°-20°	320.9	4.1
20°-30°	619.2	8.0
30°-40°	1074.9	13.8
40°-50°	1560.7	20.0
50°-60°	1792.3	23.0
60°-70°	1556.1	20.0
70°-80°	732.9	9.4
80°-90°	36.2	0.5
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°	7784.9	100.0
0°-180°	7784.9	100.0

Coefficient of Utilization

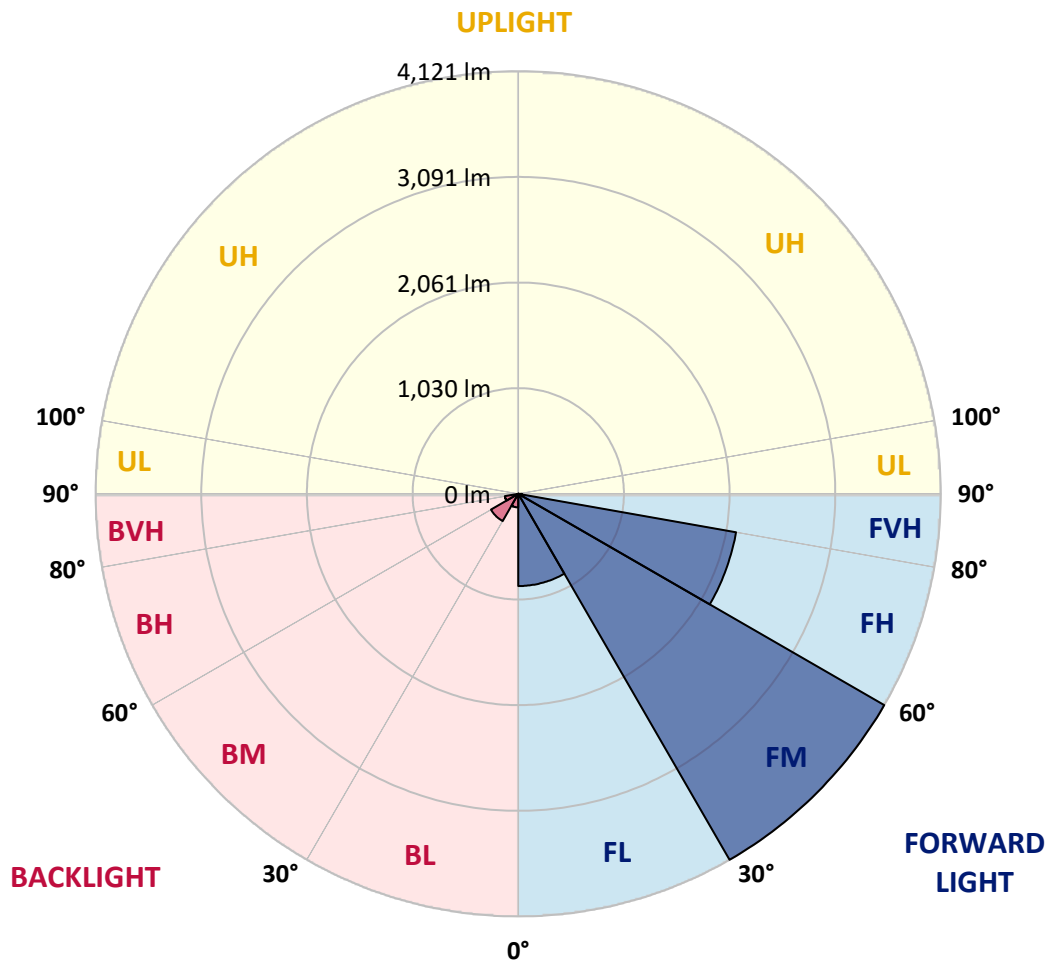


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	899.1	11.5			
FM (30°-60°)	4121.1	52.9			
FH (60°-80°)	2156.4	27.7			G2/5000
FVH (80°-90°)	35.6	0.5			G1/100
BL (0°-30°)	132.6	1.7	B1/500		
BM (30°-60°)	306.9	3.9	B1/1000		
BH (60°-80°)	132.6	1.7	B1/500		G1/500
BVH (80°-90°)	0.7	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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7
2.5°	1242.9	1250.6	1239.5	1218.2	1186.3	1165.5	1114.8	1066.9	1013.7	996.8	943.6
5°	1515.1	1521.8	1509.2	1486.0	1443.5	1402.9	1336.2	1236.1	1132.2	1098.8	1004.5
7.5°	1716.7	1720.5	1715.6	1694.4	1653.7	1607.8	1533.4	1415.0	1260.8	1224.1	1079.4
10°	1861.6	1874.2	1872.8	1864.6	1837.5	1800.2	1721.0	1586.1	1404.9	1357.4	1164.1
12.5°	1957.9	1971.9	1980.1	1998.4	1997.0	1973.3	1903.7	1761.1	1548.4	1492.8	1259.3
15°	1985.9	2000.9	2032.3	2074.8	2112.5	2124.6	2075.8	1932.7	1706.5	1635.4	1357.0
17.5°	1969.9	1993.1	2030.8	2098.1	2180.7	2235.3	2230.0	2098.5	1850.0	1768.8	1452.6
20°	2005.2	2027.4	2057.0	2113.5	2209.7	2308.8	2348.5	2257.0	1992.7	1907.5	1553.2
22.5°	2200.6	2196.7	2199.5	2208.8	2266.3	2364.4	2446.1	2401.2	2133.8	2046.8	1659.6
25°	2509.9	2492.5	2463.1	2413.3	2398.7	2446.1	2531.1	2528.8	2282.7	2189.4	1768.3
27.5°	2864.8	2861.8	2792.7	2672.8	2605.1	2586.8	2627.4	2653.0	2430.2	2330.5	1877.6
30°	3204.6	3212.4	3119.1	2985.6	2861.4	2789.3	2752.6	2771.0	2580.0	2482.9	1990.2
32.5°	3500.5	3508.7	3407.1	3251.0	3097.2	3010.2	2932.9	2887.4	2743.4	2637.5	2114.0
35°	3750.4	3758.6	3642.1	3469.5	3305.6	3226.8	3139.4	3015.1	2907.7	2809.1	2251.7
37.5°	3973.7	3971.3	3815.2	3641.1	3480.2	3417.8	3371.8	3172.2	3076.9	2981.7	2404.5
40°	4105.6	4115.8	3982.4	3790.4	3634.3	3588.9	3586.0	3367.0	3272.3	3180.0	2571.8
42.5°	4144.4	4162.2	4065.6	3907.9	3766.4	3717.1	3792.9	3577.8	3499.5	3409.6	2760.8
45°	4074.8	4092.1	4048.1	3938.9	3856.3	3824.4	3970.8	3796.3	3742.2	3653.2	2974.0
47.5°	3871.7	3893.5	3904.1	3880.9	3879.9	3912.3	4130.3	4026.4	4030.3	3939.4	3221.1
50°	3478.6	3515.4	3613.1	3695.2	3822.4	3981.9	4285.5	4275.9	4355.1	4276.8	3543.0
52.5°	2764.2	2816.4	3152.9	3377.7	3663.4	3968.9	4456.2	4676.2	4925.1	4810.5	3996.9
55°	2221.3	2221.3	2495.0	2915.5	3353.0	3882.8	4530.6	4936.2	5313.3	5286.2	4316.5
57.5°	1810.9	1832.6	2007.2	2378.9	2903.9	3677.9	4576.5	5099.6	5626.0	5606.2	4628.7
60°	1117.7	1164.6	1494.2	1861.2	2393.0	3312.9	4547.5	5264.9	6005.5	6021.5	5004.9
62.5°	629.5	646.8	793.8	1339.1	1860.7	2822.2	4325.6	5357.3	6490.9	6558.6	5392.5
65°	434.6	443.3	499.9	833.4	1289.8	2246.9	3892.0	5299.8	6977.2	7114.0	5721.2
67.5°	315.7	320.0	355.3	509.0	765.3	1629.1	3212.4	5009.7	7234.9	7463.5	5784.1
70°	242.7	245.6	271.2	334.6	452.0	1005.5	2333.0	4432.9	7048.3	7321.4	5462.1
72.5°	197.2	200.2	220.0	247.5	299.7	594.6	1414.0	3600.0	6224.5	6519.4	4650.0
75°	166.3	170.1	188.1	205.9	234.9	381.9	663.3	2507.0	4681.0	4874.3	3233.6
77.5°	92.4	85.1	152.7	170.7	198.2	241.7	310.4	1475.4	2621.5	2675.2	1434.8
80°	57.5	59.4	121.4	137.2	152.3	121.9	142.2	568.1	908.9	863.4	278.0
82.5°	3.4	7.7	93.3	99.1	104.4	52.2	53.7	192.9	218.9	201.1	49.3
85°	0.0	0.0	42.5	34.3	36.3	15.0	15.5	45.0	29.5	31.9	9.6
87.5°	0.0	0.0	0.0	0.9	0.0	1.4	2.9	3.9	1.4	1.9	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

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7	897.7
2.5°	909.8	876.0	807.3	740.2	685.5	634.7	598.5	564.2	546.7	545.8	544.8
5°	937.4	866.3	729.0	607.6	510.0	431.7	380.9	344.7	326.3	320.0	319.1
7.5°	976.0	869.2	660.3	491.6	376.6	309.3	280.3	268.8	265.0	260.6	259.6
10°	1024.9	876.0	598.9	396.0	296.8	263.0	251.3	246.5	243.6	240.8	239.7
12.5°	1079.4	882.2	538.0	328.7	261.1	243.6	235.4	229.6	225.8	222.3	221.4
15°	1132.6	886.1	474.7	281.9	242.7	228.7	220.0	213.7	208.4	204.5	204.0
17.5°	1185.3	891.4	415.2	253.8	227.7	213.7	205.0	197.2	192.9	188.5	188.1
20°	1243.8	890.4	359.2	234.0	212.7	198.6	189.5	182.2	177.9	173.0	172.6
22.5°	1298.0	885.6	309.9	217.1	197.2	183.7	173.5	166.3	162.0	158.1	157.6
25°	1360.4	881.8	268.8	201.6	182.8	169.2	158.1	151.3	146.5	143.1	142.6
27.5°	1420.2	876.0	238.8	187.6	168.7	155.7	145.0	137.2	132.9	130.5	130.5
30°	1479.3	874.5	227.7	174.0	156.1	143.1	132.4	125.3	121.9	120.8	120.3
32.5°	1550.3	878.3	232.6	169.2	144.5	131.5	121.4	116.0	112.6	112.6	112.6
35°	1626.3	877.4	239.7	173.5	136.8	119.9	112.1	108.8	105.4	105.4	105.4
37.5°	1721.5	878.8	245.6	180.8	133.9	110.2	105.9	101.5	99.6	99.6	99.6
40°	1863.6	926.7	242.7	187.1	132.9	103.4	94.7	93.3	91.8	91.8	91.8
42.5°	2037.6	1030.6	246.5	187.6	132.4	98.6	87.0	89.9	86.5	86.0	85.6
45°	2228.0	1144.2	271.2	177.4	132.0	96.2	83.1	86.5	81.2	81.2	81.2
47.5°	2417.1	1256.9	296.3	162.9	130.5	95.7	79.7	77.8	76.4	76.9	76.9
50°	2677.7	1348.7	306.0	143.1	127.1	94.7	73.5	74.0	73.0	74.0	74.0
52.5°	2961.4	1368.1	294.4	120.8	117.5	91.8	69.1	71.0	70.6	71.5	71.5
55°	3138.3	1347.3	243.1	100.6	102.5	80.3	64.8	68.7	68.7	68.7	68.7
57.5°	3321.1	1258.8	172.6	81.7	85.1	65.7	60.9	66.2	65.7	65.3	65.3
60°	3452.6	1115.7	113.6	67.2	67.6	54.1	56.6	62.3	61.9	59.4	59.4
62.5°	3550.7	957.7	73.0	57.1	51.8	48.8	51.8	56.6	54.6	49.3	48.4
65°	3539.6	738.6	56.1	48.8	42.5	42.5	45.0	49.3	43.5	34.8	33.8
67.5°	3333.2	499.9	46.4	41.1	35.8	35.3	37.2	41.1	37.2	29.5	28.5
70°	2964.3	326.8	37.2	31.9	28.5	26.1	29.9	35.3	31.5	23.7	22.8
72.5°	2406.0	199.2	28.1	23.2	20.8	16.9	23.7	29.0	25.1	17.4	16.4
75°	1556.6	101.5	19.4	15.0	11.1	10.1	17.4	21.7	17.4	10.7	9.2
77.5°	595.5	42.5	10.7	6.8	5.8	4.8	9.6	13.0	7.3	2.5	1.9
80°	114.6	17.9	5.3	3.4	2.9	1.9	1.4	0.9	0.0	0.0	0.0
82.5°	19.8	5.8	1.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	0.0	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)