

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: P961840

Luminaire Tested: **NAV-SB2B-722-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961840
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-SB2B-722-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 450mA 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: 8072.9 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

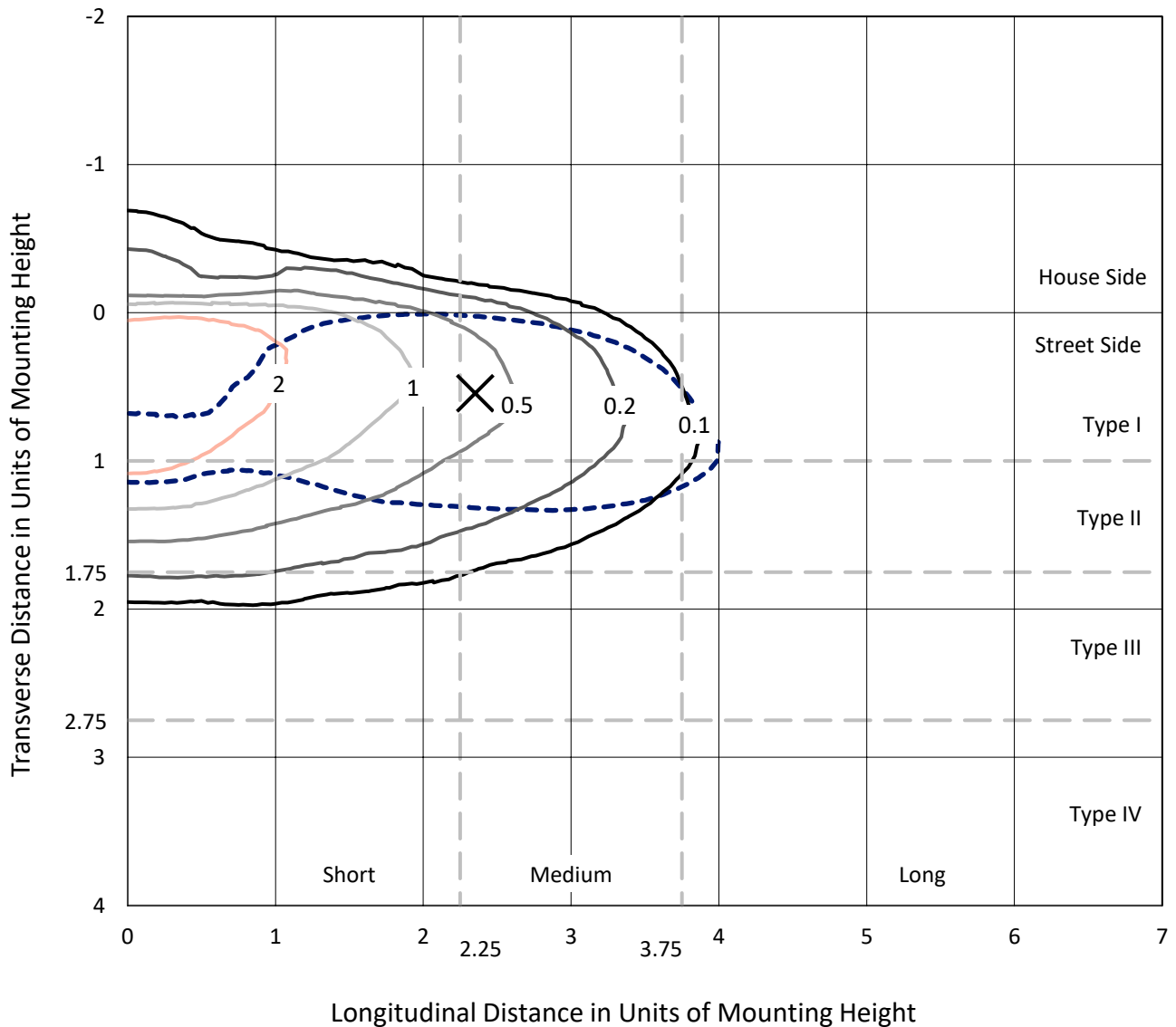
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

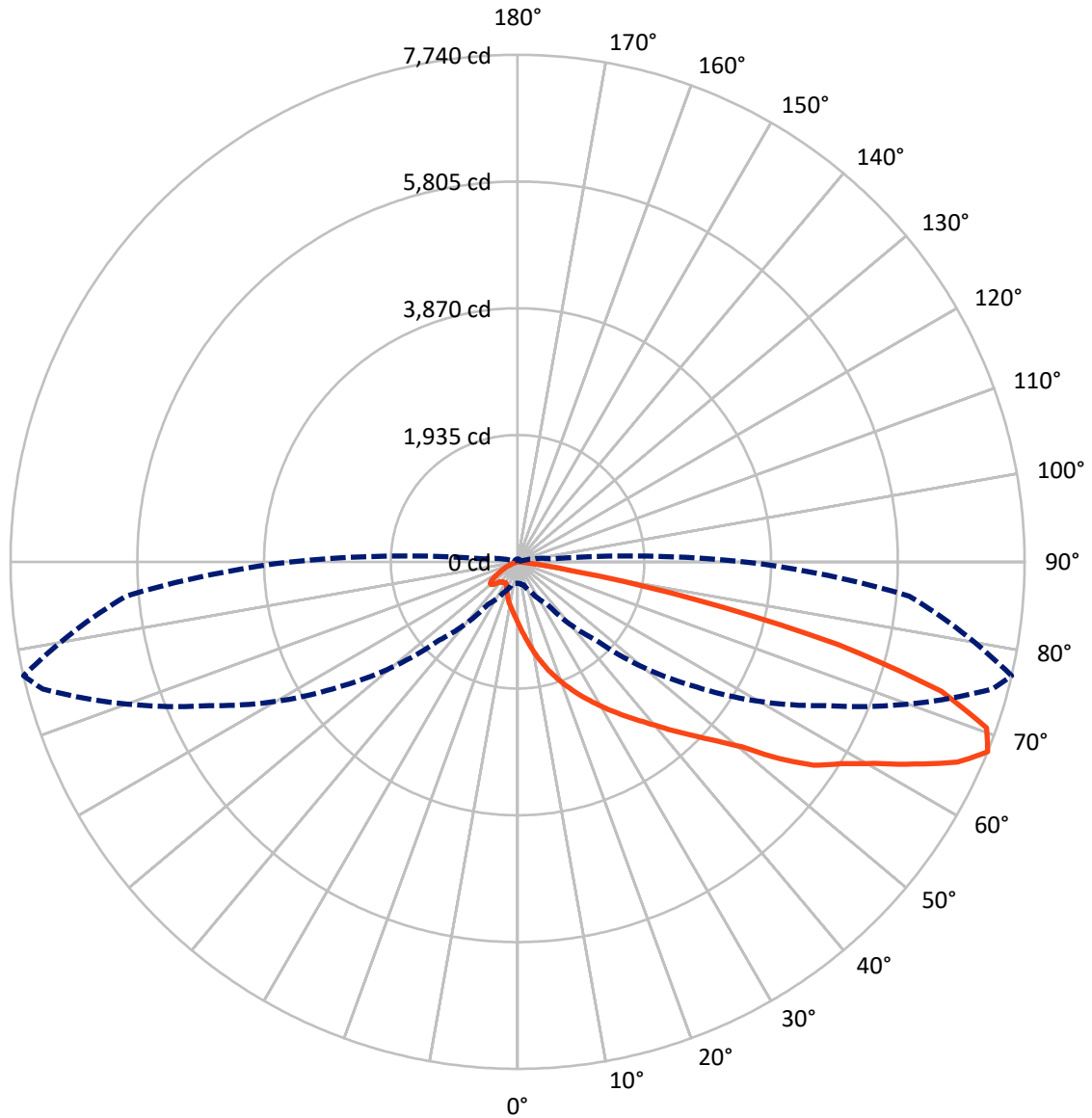
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 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	593.9	0.0	593.9
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	7479.0	0.0	7479.0
	% Fixture	92.6	0.0	92.6
Total	Lumens	8072.9	0.0	8072.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.0	1.2
10°-20°	332.7	4.1
20°-30°	642.1	8.0
30°-40°	1114.7	13.8
40°-50°	1618.5	20.0
50°-60°	1858.6	23.0
60°-70°	1613.6	20.0
70°-80°	760.0	9.4
80°-90°	37.6	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°	8072.9	100.0
0°-180°	8072.9	100.0

Coefficient of Utilization

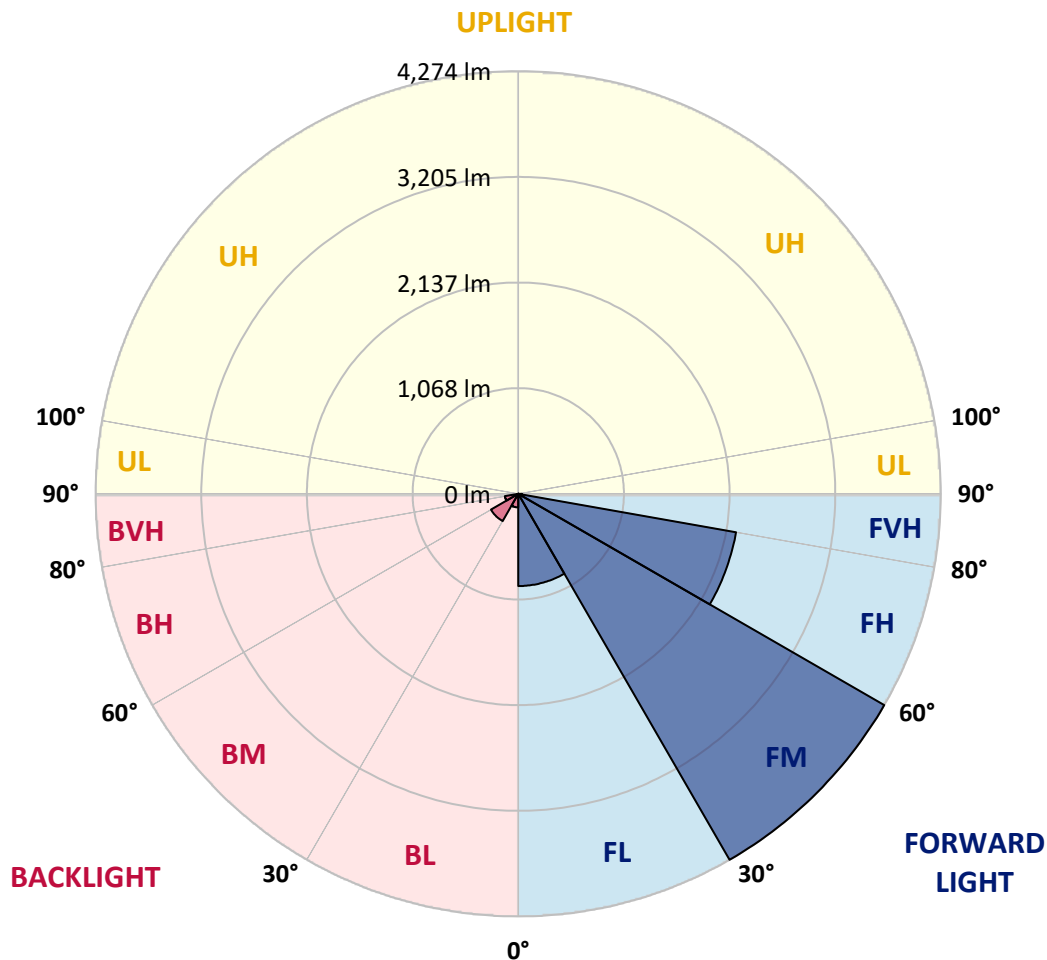


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	932.3	11.5			
FM (30°-60°)	4273.6	52.9			
FH (60°-80°)	2236.2	27.7			G2/5000
FVH (80°-90°)	36.9	0.5			G1/100
BL (0°-30°)	137.5	1.7	B1/500		
BM (30°-60°)	318.2	3.9	B1/1000		
BH (60°-80°)	137.5	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°	930.9	930.9	930.9	930.9	930.9	930.9	930.9	930.9	930.9	930.9	930.9
2.5°	1288.8	1296.8	1285.4	1263.3	1230.2	1208.7	1156.0	1106.4	1051.2	1033.7	978.6
5°	1571.1	1578.1	1565.1	1541.0	1496.9	1454.8	1385.6	1281.9	1174.0	1139.5	1041.7
7.5°	1780.1	1784.1	1779.1	1757.1	1714.9	1667.4	1590.2	1467.3	1307.4	1269.3	1119.4
10°	1930.5	1943.6	1942.1	1933.6	1905.5	1866.8	1784.6	1644.8	1456.8	1407.6	1207.1
12.5°	2030.3	2044.9	2053.4	2072.4	2070.9	2046.3	1974.2	1826.2	1605.7	1548.1	1305.8
15°	2059.3	2074.9	2107.5	2151.6	2190.7	2203.2	2152.6	2004.2	1769.6	1696.0	1407.1
17.5°	2042.8	2066.9	2106.0	2175.7	2261.4	2318.0	2312.5	2176.2	1918.5	1834.2	1506.4
20°	2079.4	2102.5	2133.0	2191.8	2291.5	2394.2	2435.3	2340.6	2066.4	1978.1	1610.7
22.5°	2282.0	2278.0	2280.9	2290.5	2350.1	2451.9	2536.6	2490.0	2212.8	2122.6	1721.0
25°	2602.8	2584.7	2554.2	2502.5	2487.5	2536.6	2624.8	2622.4	2367.1	2270.4	1833.7
27.5°	2970.8	2967.7	2896.0	2771.7	2701.5	2682.5	2724.6	2751.2	2520.1	2416.7	1947.1
30°	3323.2	3331.1	3234.4	3096.0	2967.3	2892.5	2854.4	2873.5	2675.5	2574.7	2063.8
32.5°	3629.9	3638.4	3533.2	3371.3	3211.8	3121.6	3041.4	2994.3	2844.9	2735.1	2192.2
35°	3889.2	3897.7	3776.8	3597.9	3427.9	3346.2	3255.5	3126.7	3015.3	2913.0	2335.1
37.5°	4120.7	4118.2	3956.3	3775.8	3608.9	3544.2	3496.6	3289.5	3190.8	3092.0	2493.5
40°	4257.5	4268.1	4129.7	3930.8	3768.8	3721.7	3718.7	3491.6	3393.4	3297.6	2666.9
42.5°	4297.7	4316.3	4215.9	4052.5	3905.7	3854.5	3933.2	3710.2	3628.9	3535.7	2862.9
45°	4225.5	4243.5	4197.9	4084.6	3998.9	3965.8	4117.7	3936.7	3880.6	3788.4	3084.0
47.5°	4014.9	4037.5	4048.5	4024.5	4023.4	4057.1	4283.2	4175.3	4179.3	4085.1	3340.2
50°	3607.4	3645.5	3746.8	3832.0	3963.8	4129.2	4444.1	4434.0	4516.3	4435.1	3674.1
52.5°	2866.5	2920.6	3269.5	3502.6	3798.9	4115.7	4621.0	4849.2	5107.3	4988.5	4144.8
55°	2303.5	2303.5	2587.2	3023.3	3477.0	4026.5	4698.2	5118.8	5509.9	5481.8	4476.2
57.5°	1877.9	1900.5	2081.5	2467.0	3011.3	3813.9	4745.9	5288.3	5834.2	5813.6	4800.0
60°	1159.0	1207.7	1549.5	1930.1	2481.4	3435.5	4715.8	5459.8	6227.7	6244.3	5190.0
62.5°	652.7	670.8	823.2	1388.6	1929.6	2926.6	4485.7	5555.5	6731.1	6801.2	5592.1
65°	450.7	459.7	518.3	864.3	1337.5	2330.0	4036.0	5495.8	7235.4	7377.2	5932.9
67.5°	327.4	331.9	368.5	527.9	793.6	1689.4	3331.1	5195.0	7502.5	7739.7	5998.1
70°	251.6	254.7	281.3	346.9	468.7	1042.7	2419.3	4596.9	7309.1	7592.3	5664.3
72.5°	204.5	207.6	228.1	256.7	310.8	616.6	1466.4	3733.3	6454.8	6760.6	4822.0
75°	172.4	176.5	195.1	213.5	243.6	396.1	687.8	2599.8	4854.1	5054.7	3353.2
77.5°	95.7	88.3	158.4	176.9	205.5	250.6	321.8	1530.0	2718.6	2774.3	1487.9
80°	59.7	61.7	125.9	142.4	158.0	126.3	147.4	589.1	942.5	895.3	288.2
82.5°	3.5	8.0	96.8	102.8	108.2	54.1	55.7	200.0	227.1	208.6	51.1
85°	0.0	0.0	44.1	35.6	37.6	15.6	16.1	46.6	30.5	33.1	10.0
87.5°	0.0	0.0	0.0	1.0	0.0	1.5	3.0	4.0	1.5	2.0	3.5
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°	930.9	930.9	930.9	930.9	930.9	930.9	930.9	930.9	930.9	930.9	930.9
2.5°	943.4	908.4	837.2	767.5	710.8	658.3	620.6	585.1	566.9	566.0	565.0
5°	972.0	898.3	755.9	630.2	528.9	447.6	395.0	357.4	338.4	331.9	330.9
7.5°	1012.1	901.4	684.8	509.8	390.5	320.8	290.8	278.7	274.7	270.2	269.2
10°	1062.7	908.4	621.2	410.6	307.8	272.8	260.7	255.6	252.7	249.7	248.7
12.5°	1119.4	914.9	557.9	340.9	270.7	252.7	244.2	238.1	234.1	230.6	229.6
15°	1174.5	918.9	492.3	292.2	251.6	237.1	228.1	221.6	216.1	212.1	211.6
17.5°	1229.2	924.4	430.6	263.2	236.2	221.6	212.6	204.5	200.0	195.5	195.1
20°	1289.9	923.4	372.5	242.6	220.6	206.0	196.5	189.0	184.5	179.5	179.0
22.5°	1346.0	918.4	321.3	225.1	204.5	190.4	180.0	172.4	167.9	163.9	163.4
25°	1410.7	914.4	278.7	209.0	189.5	175.5	163.9	156.9	151.9	148.4	147.9
27.5°	1472.8	908.4	247.6	194.5	175.0	161.4	150.4	142.4	137.9	135.4	135.4
30°	1534.0	906.8	236.2	180.5	162.0	148.4	137.4	129.9	126.3	125.4	124.8
32.5°	1607.7	910.9	241.1	175.5	149.9	136.3	125.9	120.3	116.8	116.8	116.8
35°	1686.4	909.9	248.7	180.0	141.9	124.3	116.3	112.7	109.3	109.3	109.3
37.5°	1785.1	911.3	254.7	187.5	138.9	114.3	109.8	105.3	103.3	103.3	103.3
40°	1932.5	961.0	251.6	194.0	137.9	107.3	98.3	96.8	95.2	95.2	95.2
42.5°	2113.0	1068.8	255.6	194.5	137.4	102.3	90.2	93.3	89.7	89.3	88.8
45°	2310.6	1186.5	281.3	184.0	136.8	99.7	86.2	89.7	84.3	84.3	84.3
47.5°	2506.5	1303.4	307.3	168.9	135.4	99.2	82.7	80.7	79.2	79.7	79.7
50°	2776.7	1398.6	317.3	148.4	131.8	98.3	76.2	76.7	75.7	76.7	76.7
52.5°	3071.0	1418.7	305.2	125.4	121.8	95.2	71.6	73.7	73.2	74.2	74.2
55°	3254.5	1397.2	252.2	104.2	106.3	83.2	67.1	71.1	71.1	71.1	71.1
57.5°	3444.0	1305.4	179.0	84.8	88.3	68.2	63.1	68.7	68.2	67.6	67.6
60°	3580.3	1157.0	117.8	69.7	70.2	56.2	58.6	64.7	64.2	61.7	61.7
62.5°	3682.1	993.1	75.7	59.1	53.6	50.6	53.6	58.6	56.7	51.1	50.1
65°	3670.5	766.0	58.1	50.6	44.1	44.1	46.6	51.1	45.1	36.1	35.1
67.5°	3456.5	518.3	48.2	42.6	37.1	36.6	38.6	42.6	38.6	30.5	29.6
70°	3074.0	338.9	38.6	33.1	29.6	27.1	31.1	36.6	32.6	24.6	23.6
72.5°	2495.0	206.5	29.1	24.1	21.5	17.5	24.6	30.0	26.0	18.0	17.0
75°	1614.2	105.3	20.1	15.6	11.5	10.6	18.0	22.5	18.0	11.1	9.5
77.5°	617.6	44.1	11.1	7.0	6.0	5.0	10.0	13.5	7.5	2.5	2.0
80°	118.8	18.6	5.5	3.5	3.0	2.0	1.5	1.0	0.0	0.0	0.0
82.5°	20.6	6.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.0	1.0	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)