

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: P882128

Luminaire Tested: **NAV-SB1D-835-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882128
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-835-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6739 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

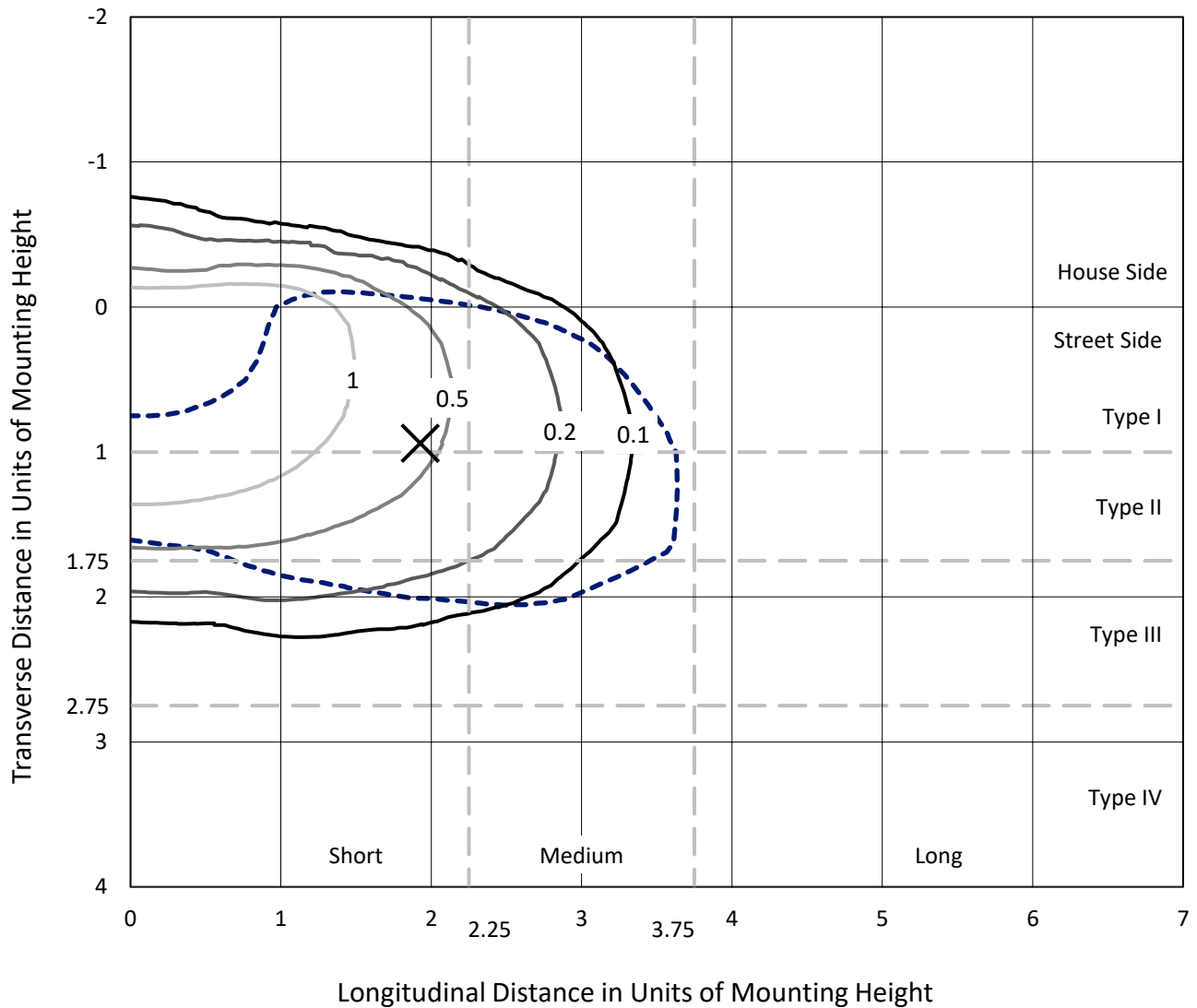
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

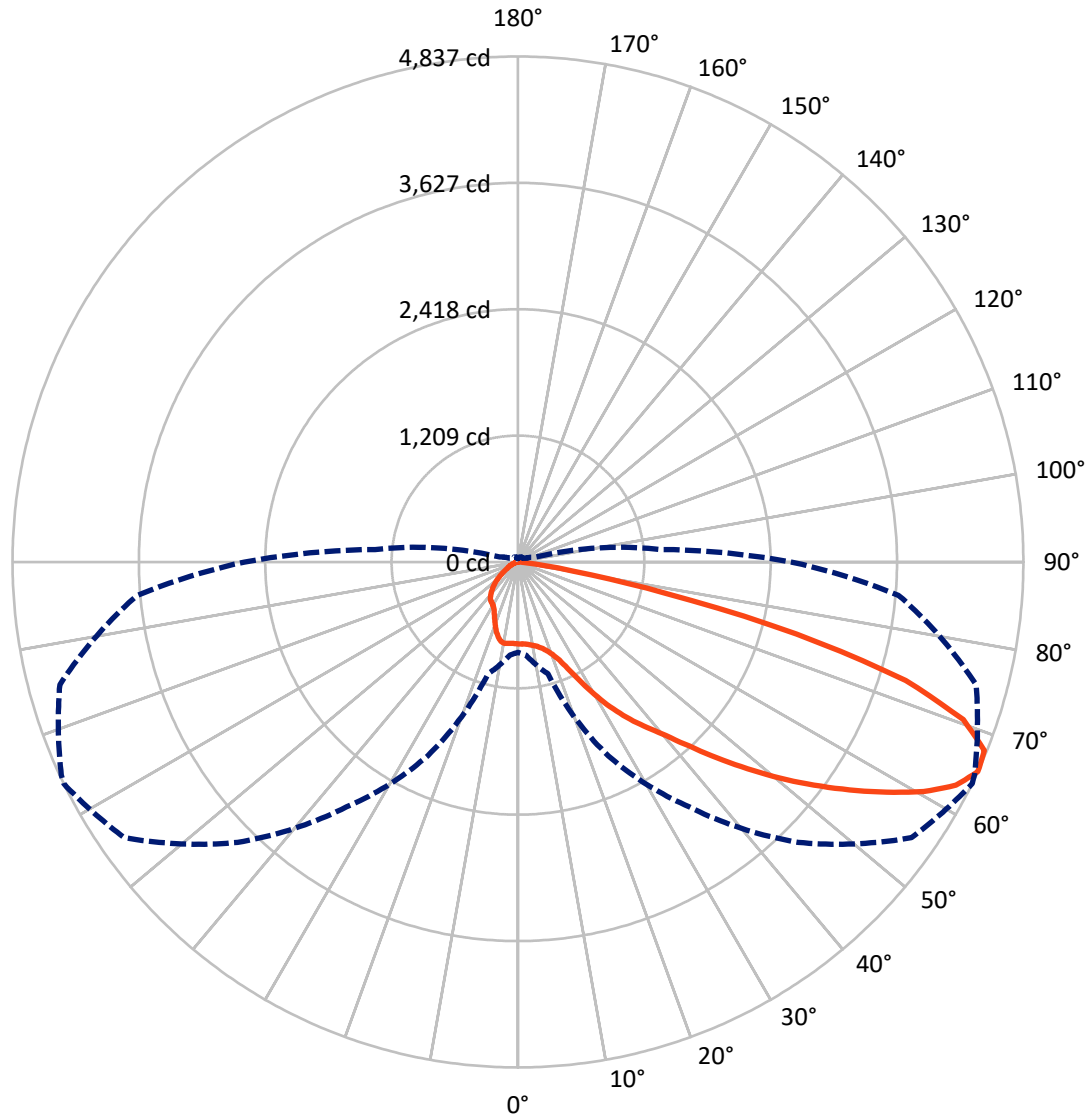
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	901.2	0.0	901.2
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	5837.8	0.0	5837.8
	% Fixture	86.6	0.0	86.6
Total	Lumens	6739.0	0.0	6739.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.3	1.1
10°-20°	196.1	2.9
20°-30°	371.7	5.5
30°-40°	752.1	11.2
40°-50°	1281.2	19.0
50°-60°	1742.3	25.9
60°-70°	1636.1	24.3
70°-80°	655.5	9.7
80°-90°	31.8	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°	6739.0	100.0
0°-180°	6739.0	100.0

Coefficient of Utilization



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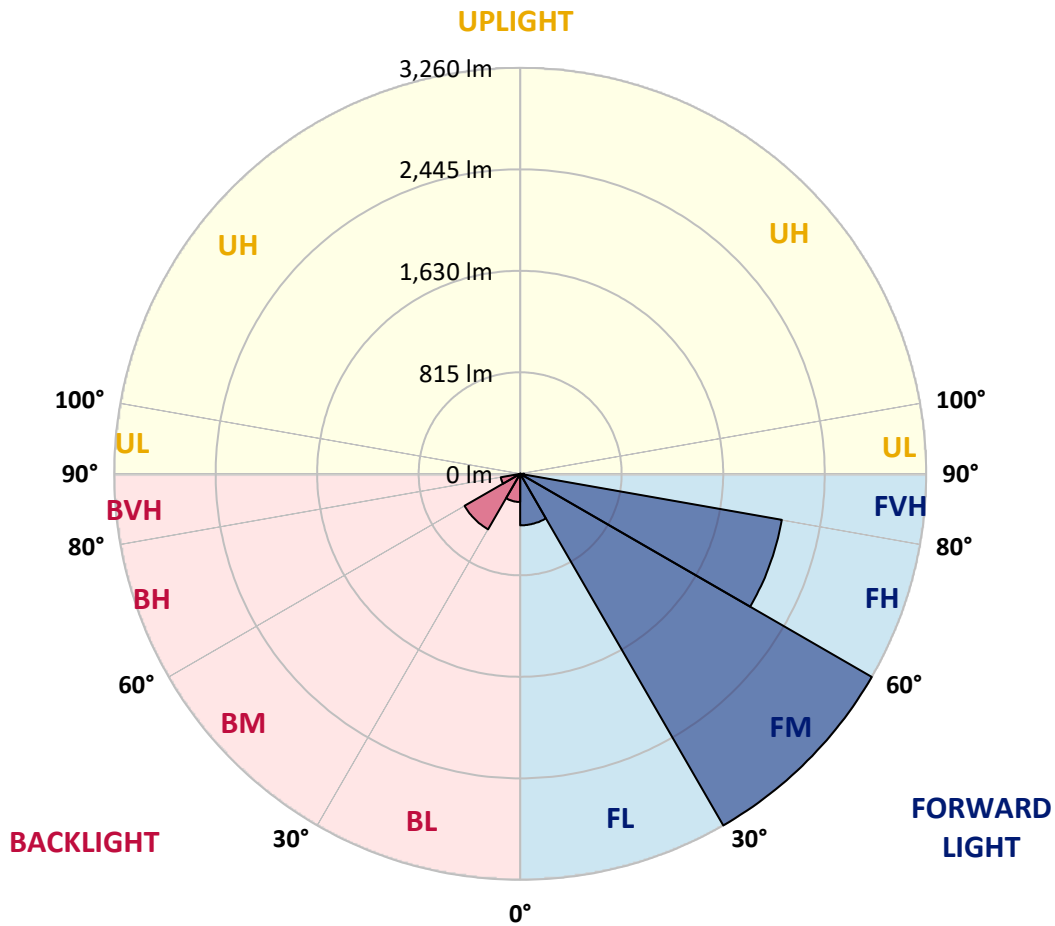
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	413.9	6.1			
FM (30°-60°)	3260.3	48.4			
FH (60°-80°)	2133.4	31.7			G2/5000
FVH (80°-90°)	30.2	0.4			G1/100
BL (0°-30°)	226.3	3.4	B1/500		
BM (30°-60°)	515.2	7.6	B1/1000		
BH (60°-80°)	158.2	2.3	B1/500		G1/500
BVH (80°-90°)	1.6	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	783.8	783.8	783.8	783.8	783.8	783.8	783.8	783.8	783.8	783.8	783.8
2.5°	781.1	786.5	785.2	783.8	783.4	784.3	784.7	784.3	784.3	784.3	784.7
5°	766.2	770.7	770.7	773.9	778.4	783.8	787.9	788.8	789.7	791.0	790.6
7.5°	737.7	741.3	744.1	754.5	765.7	780.2	792.4	798.7	799.6	804.6	806.4
10°	718.3	722.8	727.3	738.2	754.5	776.1	796.9	812.3	814.5	826.3	831.7
12.5°	717.4	721.9	727.8	739.5	758.5	781.6	806.9	829.0	833.1	850.2	861.5
15°	726.9	732.3	737.7	752.2	772.5	800.5	827.6	855.2	859.3	883.7	895.9
17.5°	746.3	753.5	757.6	772.1	793.8	824.9	860.6	892.2	895.9	924.3	939.7
20°	784.7	793.3	794.7	806.4	827.6	861.1	903.5	942.8	947.4	979.9	997.0
22.5°	864.2	876.4	865.6	871.5	890.4	923.9	969.9	1019.6	1026.0	1063.0	1078.4
25°	1004.3	1021.4	993.4	983.5	991.6	1026.4	1084.2	1147.0	1154.3	1184.1	1191.8
27.5°	1279.4	1257.3	1214.8	1173.2	1148.8	1168.7	1233.8	1311.5	1320.5	1349.4	1340.4
30°	1581.6	1562.2	1504.8	1412.7	1354.8	1351.7	1411.8	1498.5	1508.9	1536.5	1508.9
32.5°	1884.3	1865.8	1803.5	1690.1	1589.8	1540.1	1581.6	1677.9	1683.3	1700.9	1660.2
35°	2182.0	2163.1	2100.7	1984.6	1861.3	1748.3	1740.2	1848.6	1850.4	1869.0	1808.4
37.5°	2481.6	2465.7	2399.3	2285.5	2164.0	2008.1	1932.7	2010.4	2012.6	2030.7	1967.9
40°	2695.2	2702.0	2656.4	2568.3	2463.9	2293.6	2148.6	2182.5	2168.9	2199.2	2161.7
42.5°	2878.7	2892.2	2852.5	2808.2	2747.6	2597.7	2416.0	2410.2	2388.5	2404.8	2365.9
45°	3037.2	3048.5	3012.8	3002.4	3001.1	2895.8	2708.3	2673.1	2642.8	2639.7	2593.1
47.5°	3095.5	3117.2	3132.6	3167.3	3235.1	3190.8	3010.6	2955.9	2922.0	2897.2	2823.5
50°	3117.6	3140.7	3193.1	3294.3	3454.7	3473.6	3311.5	3250.0	3208.4	3163.3	3054.8
52.5°	3087.8	3128.9	3199.4	3369.7	3602.4	3700.4	3600.1	3546.4	3498.9	3425.3	3264.5
55°	2912.1	2953.2	3097.3	3368.8	3676.0	3859.4	3873.0	3849.1	3795.7	3679.6	3433.9
57.5°	2541.6	2602.6	2830.8	3254.1	3674.7	3996.3	4140.4	4157.6	4098.0	3931.7	3567.2
60°	2028.4	2111.1	2389.4	2999.7	3561.3	4070.4	4374.9	4460.7	4397.5	4180.2	3675.1
62.5°	1415.4	1511.2	1774.5	2601.3	3302.0	4017.1	4546.1	4704.7	4656.8	4402.5	3716.7
65°	863.3	894.0	1106.4	2047.0	2861.0	3793.9	4599.0	4836.6	4820.8	4538.5	3655.2
67.5°	575.1	600.9	661.8	1403.6	2220.9	3348.0	4472.5	4813.6	4818.1	4516.3	3430.3
70°	346.5	368.6	408.4	816.3	1439.3	2650.1	4080.8	4519.9	4546.1	4220.4	3003.8
72.5°	142.8	157.7	193.8	370.0	745.4	1681.9	3249.6	3880.7	3941.7	3548.6	2305.4
75°	80.9	88.5	113.8	185.7	323.5	783.8	1968.3	2754.9	2844.8	2445.9	1386.9
77.5°	53.8	57.4	73.6	120.2	182.1	267.4	841.2	1435.3	1606.9	1335.9	600.4
80°	36.1	39.3	50.6	80.4	118.4	114.7	267.9	531.7	654.2	459.0	146.4
82.5°	24.4	24.8	36.1	52.9	75.0	55.6	79.1	165.3	207.8	132.8	55.6
85°	14.0	13.6	26.7	30.7	33.4	23.0	23.9	49.7	65.1	56.0	31.6
87.5°	1.8	2.7	10.4	8.1	4.5	5.0	5.0	8.6	12.6	13.6	6.8
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°	783.8	783.8	783.8	783.8	783.8	783.8	783.8	783.8	783.8	783.8	783.8
2.5°	784.7	784.3	782.9	781.6	778.4	776.6	777.5	776.6	776.1	776.6	778.4
5°	790.6	789.2	785.6	781.1	774.8	767.1	762.1	754.9	748.1	744.1	745.0
7.5°	806.4	805.0	800.1	787.4	767.1	735.0	705.7	679.9	660.5	649.2	649.6
10°	831.7	829.4	821.8	793.8	740.4	670.4	612.1	563.8	532.2	517.3	515.9
12.5°	861.5	858.8	845.3	787.9	689.8	580.5	500.1	446.3	417.0	403.9	402.5
15°	896.8	893.1	866.5	759.9	616.2	481.1	407.5	367.3	348.3	336.6	337.0
17.5°	940.6	934.3	882.3	717.9	536.2	405.2	350.6	320.3	303.6	292.3	291.4
20°	997.5	987.1	895.0	667.7	462.6	357.3	312.2	286.9	274.2	264.3	262.5
22.5°	1077.0	1062.1	910.3	613.5	410.7	324.4	283.7	265.2	254.8	243.5	241.7
25°	1175.5	1157.9	929.3	563.4	375.0	295.9	262.9	247.6	235.4	222.3	220.9
27.5°	1313.3	1281.7	951.9	522.2	344.2	271.5	244.0	226.8	212.8	201.9	199.7
30°	1466.9	1414.9	971.8	497.4	316.2	248.9	219.1	201.9	188.8	181.2	179.8
32.5°	1612.4	1541.9	984.9	486.6	290.9	223.2	192.0	173.5	163.5	161.3	162.6
35°	1749.7	1656.6	983.5	476.2	268.3	197.4	165.3	146.4	138.7	140.0	140.0
37.5°	1907.8	1779.1	974.0	459.9	249.8	173.9	142.3	125.6	118.8	119.3	121.1
40°	2091.7	1920.5	968.1	429.2	229.5	152.2	123.3	109.8	104.8	103.0	102.6
42.5°	2287.7	2057.3	969.0	394.4	204.2	132.8	110.2	98.9	94.4	93.1	92.6
45°	2484.7	2187.9	970.4	358.3	177.5	117.9	100.7	91.3	88.5	86.7	86.7
47.5°	2669.9	2299.0	945.1	319.4	151.3	106.6	93.1	86.7	84.5	82.2	82.2
50°	2842.5	2373.1	884.1	274.2	130.6	97.6	87.2	82.7	80.4	78.2	78.2
52.5°	2976.7	2384.9	783.4	227.7	116.1	90.8	83.6	79.5	76.8	74.5	74.1
55°	3036.3	2311.2	640.2	184.3	104.8	84.9	80.0	75.9	72.7	70.5	70.0
57.5°	3021.0	2156.3	499.2	148.2	94.0	79.1	75.4	72.7	69.1	65.5	65.1
60°	2945.5	1948.9	376.3	123.3	84.0	72.7	70.5	68.2	63.2	57.8	56.9
62.5°	2815.0	1688.3	268.3	102.1	73.2	65.5	64.6	62.8	55.6	45.6	44.7
65°	2615.3	1371.6	180.7	84.9	62.8	57.4	57.8	54.7	45.2	33.9	33.0
67.5°	2323.4	1002.9	115.7	69.6	52.4	47.9	48.3	46.5	38.4	28.9	27.6
70°	1951.6	664.1	75.4	52.9	42.0	37.0	39.8	40.2	32.5	23.5	22.6
72.5°	1430.7	392.1	52.9	39.3	30.7	25.8	32.5	33.4	26.2	17.6	16.7
75°	815.4	186.1	39.8	28.5	19.0	18.1	25.3	25.3	18.1	11.7	10.8
77.5°	342.4	77.7	28.0	18.5	10.8	10.4	17.2	15.8	9.0	5.4	5.4
80°	98.9	34.8	14.9	9.0	4.5	4.1	6.8	5.0	2.3	0.9	0.9
82.5°	38.9	15.4	5.9	3.6	1.8	1.8	0.9	0.0	0.0	0.0	0.0
85°	23.0	6.3	2.7	1.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.9	1.4	0.9	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)