

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: P884268

Luminaire Tested: **NAV-SB5A-730-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884268  
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-SB5A-730-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

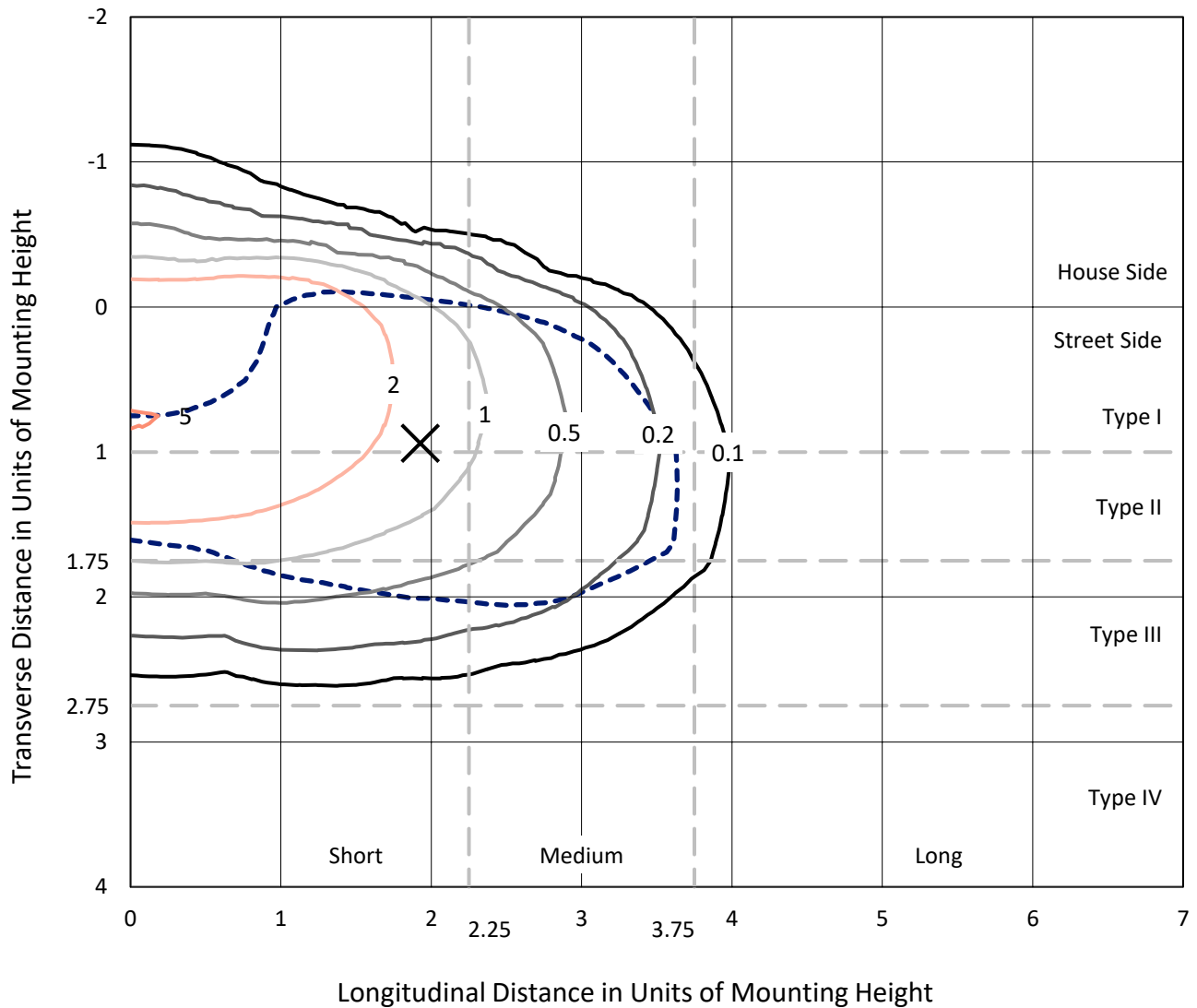
Lumens per Lamp: N/A  
Luminaire Lumens: 17573 lumens  
Efficiency: N/A  
Efficacy: 124.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G3  
  
Input Watts (W): 141.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.201  
Voltage Rise (V): NR  
Power Factor: 0.992  
Total Harmonic Distortion (THDi): 10.503  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P884268  
 CATALOG NUMBER: NAV-SB5A-730-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

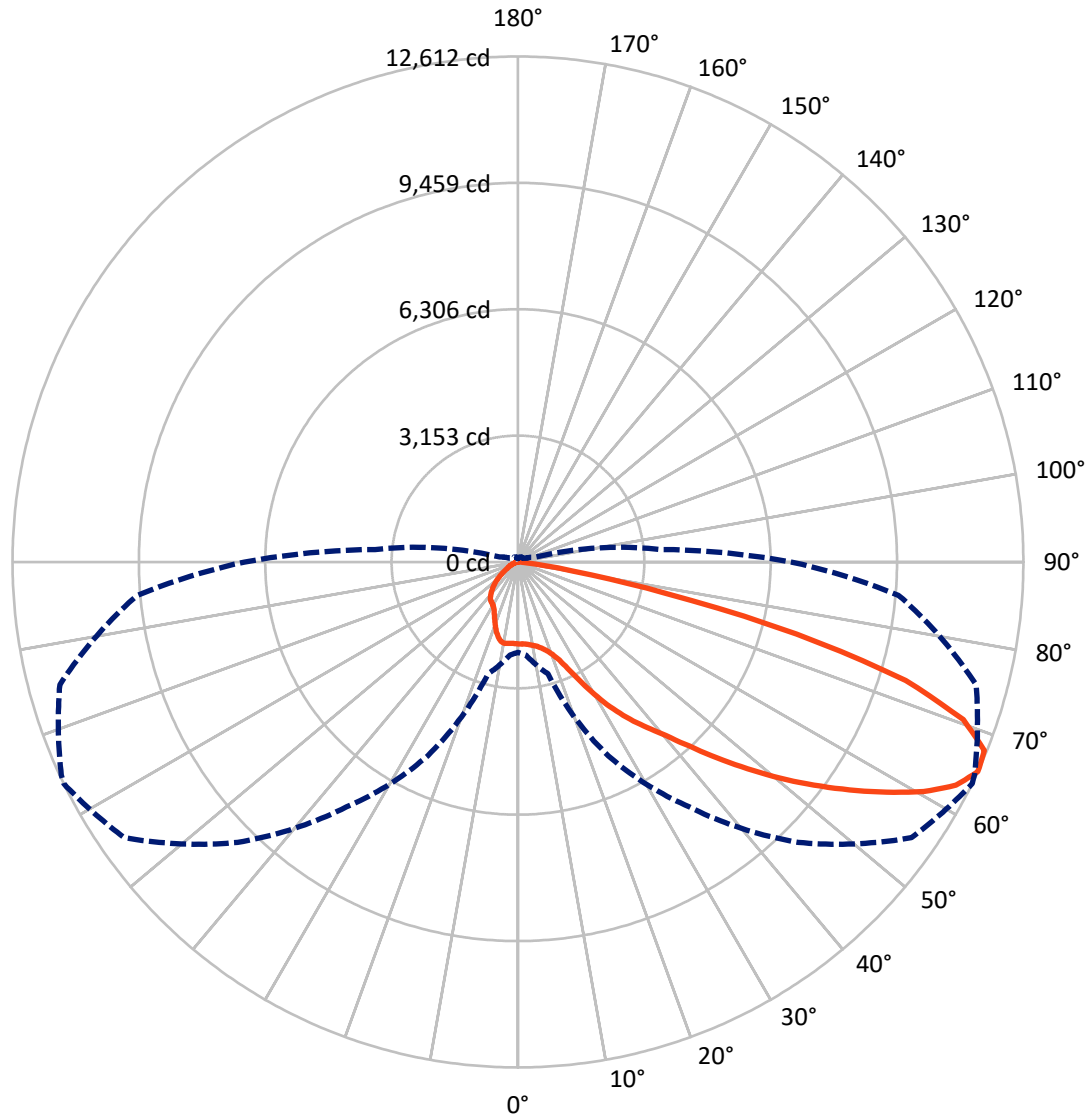
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc  
 Type III - Short - N/A

REPORT NUMBER: P884268  
CATALOG NUMBER: NAV-SB5A-730-U-T3-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P884268

CATALOG NUMBER: NAV-SB5A-730-U-T3-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2350.1	0.0	2350.1
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	15223.0	0.0	15223.0
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	17573.0	0.0	17573.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.6	1.1
10°-20°	511.5	2.9
20°-30°	969.2	5.5
30°-40°	1961.2	11.2
40°-50°	3340.8	19.0
50°-60°	4543.3	25.9
60°-70°	4266.4	24.3
70°-80°	1709.3	9.7
80°-90°	82.8	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°	17573.0	100.0
0°-180°	17573.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P884268

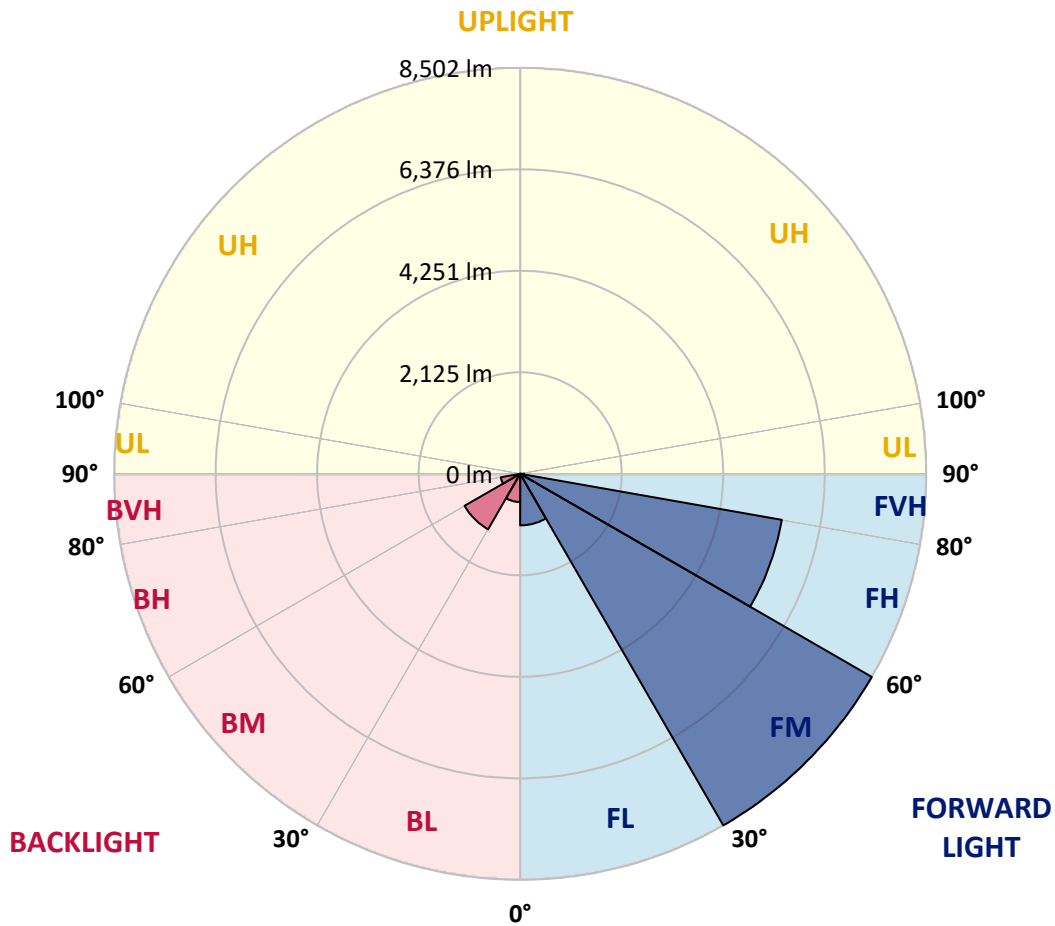
CATALOG NUMBER: NAV-SB5A-730-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1079.2	6.1			
FM (30°-60°)	8501.8	48.4			
FH (60°-80°)	5563.2	31.7			G3/7500
FVH (80°-90°)	78.8	0.4			G1/100
BL (0°-30°)	590.0	3.4	B2/1000		
BM (30°-60°)	1343.5	7.6	B2/2500		
BH (60°-80°)	412.5	2.3	B1/500		G1/500
BVH (80°-90°)	4.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type III Short



REPORT NUMBER: P884268

CATALOG NUMBER: NAV-SB5A-730-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2043.9	2043.9	2043.9	2043.9	2043.9	2043.9	2043.9	2043.9	2043.9	2043.9	2043.9
2.5°	2036.9	2051.0	2047.5	2043.9	2042.7	2045.1	2046.3	2045.1	2045.1	2045.1	2046.3
5°	1998.0	2009.8	2009.8	2018.0	2029.8	2043.9	2054.5	2056.9	2059.2	2062.8	2061.6
7.5°	1923.8	1933.2	1940.3	1967.3	1996.8	2034.5	2066.3	2082.8	2085.2	2098.1	2102.8
10°	1873.1	1884.9	1896.7	1924.9	1967.3	2023.9	2078.1	2118.1	2124.0	2154.7	2168.8
12.5°	1870.7	1882.5	1897.8	1928.5	1978.0	2038.0	2104.0	2161.7	2172.3	2217.1	2246.5
15°	1895.5	1909.6	1923.8	1961.5	2014.5	2087.5	2158.2	2230.1	2240.7	2304.3	2336.1
17.5°	1946.1	1965.0	1975.6	2013.3	2069.8	2151.1	2244.2	2326.7	2336.1	2410.3	2450.4
20°	2046.3	2068.7	2072.2	2102.8	2158.2	2245.4	2356.1	2458.6	2470.4	2555.2	2600.0
22.5°	2253.6	2285.4	2257.2	2272.5	2321.9	2409.1	2529.3	2658.9	2675.4	2772.0	2812.0
25°	2618.8	2663.6	2590.5	2564.6	2585.8	2676.5	2827.3	2991.1	3009.9	3087.7	3107.7
27.5°	3336.2	3278.5	3167.8	3059.4	2995.8	3047.6	3217.3	3419.9	3443.4	3518.8	3495.3
30°	4124.4	4073.7	3924.1	3683.8	3533.0	3524.7	3681.4	3907.6	3934.7	4006.6	3934.7
32.5°	4913.7	4865.4	4702.8	4407.1	4145.6	4016.0	4124.4	4375.3	4389.4	4435.4	4329.3
35°	5690.0	5640.5	5477.9	5175.2	4853.6	4559.1	4537.9	4820.6	4825.3	4873.6	4715.7
37.5°	6471.0	6429.8	6256.6	5959.8	5642.9	5236.4	5039.7	5242.3	5248.2	5295.3	5131.6
40°	7028.3	7045.9	6927.0	6697.2	6425.1	5981.0	5602.8	5691.2	5655.8	5734.8	5637.0
42.5°	7506.6	7541.9	7438.2	7322.8	7164.9	6773.8	6300.2	6284.9	6228.4	6270.8	6169.5
45°	7920.1	7949.5	7856.4	7829.3	7825.8	7551.3	7062.4	6970.5	6891.6	6883.4	6762.0
47.5°	8072.0	8128.6	8168.6	8259.3	8436.0	8320.6	7850.5	7708.0	7619.6	7554.9	7362.8
50°	8129.7	8189.8	8326.5	8590.4	9008.6	9058.1	8635.1	8474.9	8366.5	8248.7	7966.0
52.5°	8052.0	8159.2	8343.0	8787.1	9393.8	9649.4	9387.9	9247.7	9124.0	8932.0	8512.6
55°	7593.7	7700.9	8076.7	8784.7	9585.8	10064.1	10099.5	10037.0	9898.0	9595.2	8954.4
57.5°	6627.7	6786.8	7381.7	8485.5	9582.3	10421.1	10796.9	10841.6	10686.1	10252.6	9301.9
60°	5289.5	5505.0	6230.7	7822.3	9286.6	10614.3	11408.3	11632.1	11467.2	10900.5	9583.5
62.5°	3690.8	3940.6	4627.4	6783.2	8610.4	10475.2	11854.7	12268.2	12143.4	11480.1	9691.8
65°	2251.3	2331.4	2885.1	5337.8	7460.6	9893.3	11992.6	12612.2	12571.0	11834.7	9531.6
67.5°	1499.7	1566.8	1725.8	3660.2	5791.3	8730.6	11662.7	12552.2	12563.9	11777.0	8945.0
70°	903.6	961.3	1065.0	2128.7	3753.3	6910.5	10641.4	11786.4	11854.7	11005.4	7832.9
72.5°	372.3	411.1	505.4	964.8	1943.8	4385.9	8473.7	10119.5	10278.5	9253.6	6011.6
75°	210.9	230.9	296.9	484.2	843.5	2043.9	5132.8	7183.8	7418.2	6378.0	3616.6
77.5°	140.2	149.6	192.0	313.4	474.8	697.4	2193.5	3742.7	4190.3	3483.5	1565.6
80°	94.2	102.5	131.9	209.7	308.6	299.2	698.6	1386.6	1705.8	1196.9	381.7
82.5°	63.6	64.8	94.2	137.8	195.6	144.9	206.2	431.2	541.9	346.3	144.9
85°	36.5	35.3	69.5	80.1	87.2	60.1	62.4	129.6	169.6	146.1	82.5
87.5°	4.7	7.1	27.1	21.2	11.8	13.0	13.0	22.4	33.0	35.3	17.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P884268

CATALOG NUMBER: NAV-SB5A-730-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2043.9	2043.9	2043.9	2043.9	2043.9	2043.9	2043.9	2043.9	2043.9	2043.9	2043.9
2.5°	2046.3	2045.1	2041.6	2038.0	2029.8	2025.1	2027.4	2025.1	2023.9	2025.1	2029.8
5°	2061.6	2058.1	2048.6	2036.9	2020.4	2000.3	1987.4	1968.5	1950.9	1940.3	1942.6
7.5°	2102.8	2099.3	2086.3	2053.3	2000.3	1916.7	1840.1	1773.0	1722.3	1692.9	1694.0
10°	2168.8	2162.9	2142.9	2069.8	1930.8	1748.2	1596.3	1470.2	1387.7	1348.9	1345.3
12.5°	2246.5	2239.5	2204.1	2054.5	1798.9	1513.8	1304.1	1163.9	1087.3	1053.2	1049.6
15°	2338.4	2329.0	2259.5	1981.5	1606.9	1254.6	1062.6	957.8	908.3	877.6	878.8
17.5°	2452.7	2436.2	2300.7	1871.9	1398.3	1056.7	914.2	835.2	791.7	762.2	759.8
20°	2601.1	2574.0	2333.7	1741.2	1206.3	931.8	814.0	748.1	715.1	689.2	684.4
22.5°	2808.5	2769.6	2373.8	1599.8	1070.9	845.8	739.8	691.5	664.4	635.0	630.3
25°	3065.3	3019.4	2423.3	1469.0	977.8	771.6	685.6	645.6	613.8	579.6	576.1
27.5°	3424.6	3342.1	2482.2	1361.8	897.7	708.0	636.1	591.4	554.9	526.6	520.7
30°	3825.1	3689.7	2534.0	1297.0	824.6	649.1	571.4	526.6	492.4	472.4	468.9
32.5°	4204.5	4020.7	2568.2	1268.8	758.7	582.0	500.7	452.4	426.5	420.6	424.1
35°	4562.6	4319.9	2564.6	1241.7	699.8	514.8	431.2	381.7	361.7	365.2	365.2
37.5°	4974.9	4639.2	2539.9	1199.3	651.5	453.6	371.1	327.5	309.8	311.0	315.7
40°	5454.4	5007.9	2524.6	1119.2	598.5	397.0	321.6	286.3	273.3	268.6	267.4
42.5°	5965.7	5364.9	2526.9	1028.4	532.5	346.3	287.4	258.0	246.2	242.7	241.5
45°	6479.3	5705.3	2530.5	934.2	463.0	307.5	262.7	238.0	230.9	226.2	226.2
47.5°	6962.3	5995.1	2464.5	832.9	394.6	278.0	242.7	226.2	220.3	214.4	214.4
50°	7412.3	6188.3	2305.5	715.1	340.5	254.5	227.4	215.6	209.7	203.8	203.8
52.5°	7762.2	6218.9	2042.7	593.7	302.8	236.8	217.9	207.3	200.3	194.4	193.2
55°	7917.7	6026.9	1669.3	480.6	273.3	221.5	208.5	197.9	189.7	183.8	182.6
57.5°	7877.6	5622.8	1301.7	386.4	245.0	206.2	196.7	189.7	180.2	170.8	169.6
60°	7680.9	5082.1	981.3	321.6	219.1	189.7	183.8	177.9	164.9	150.8	148.4
62.5°	7340.4	4402.4	699.8	266.2	190.8	170.8	168.5	163.7	144.9	119.0	116.6
65°	6819.8	3576.6	471.2	221.5	163.7	149.6	150.8	142.5	117.8	88.4	86.0
67.5°	6058.7	2615.3	301.6	181.4	136.7	124.9	126.1	121.3	100.1	75.4	71.9
70°	5089.2	1731.7	196.7	137.8	109.6	96.6	103.7	104.8	84.8	61.3	58.9
72.5°	3730.9	1022.6	137.8	102.5	80.1	67.1	84.8	87.2	68.3	45.9	43.6
75°	2126.4	485.4	103.7	74.2	49.5	47.1	66.0	66.0	47.1	30.6	28.3
77.5°	893.0	202.6	73.0	48.3	28.3	27.1	44.8	41.2	23.6	14.1	14.1
80°	258.0	90.7	38.9	23.6	11.8	10.6	17.7	13.0	5.9	2.4	2.4
82.5°	101.3	40.1	15.3	9.4	4.7	4.7	2.4	0.0	0.0	0.0	0.0
85°	60.1	16.5	7.1	3.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	15.3	3.5	2.4	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)