

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: P883309

Luminaire Tested: **NAV-SB3C-830-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883309  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3C-830-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

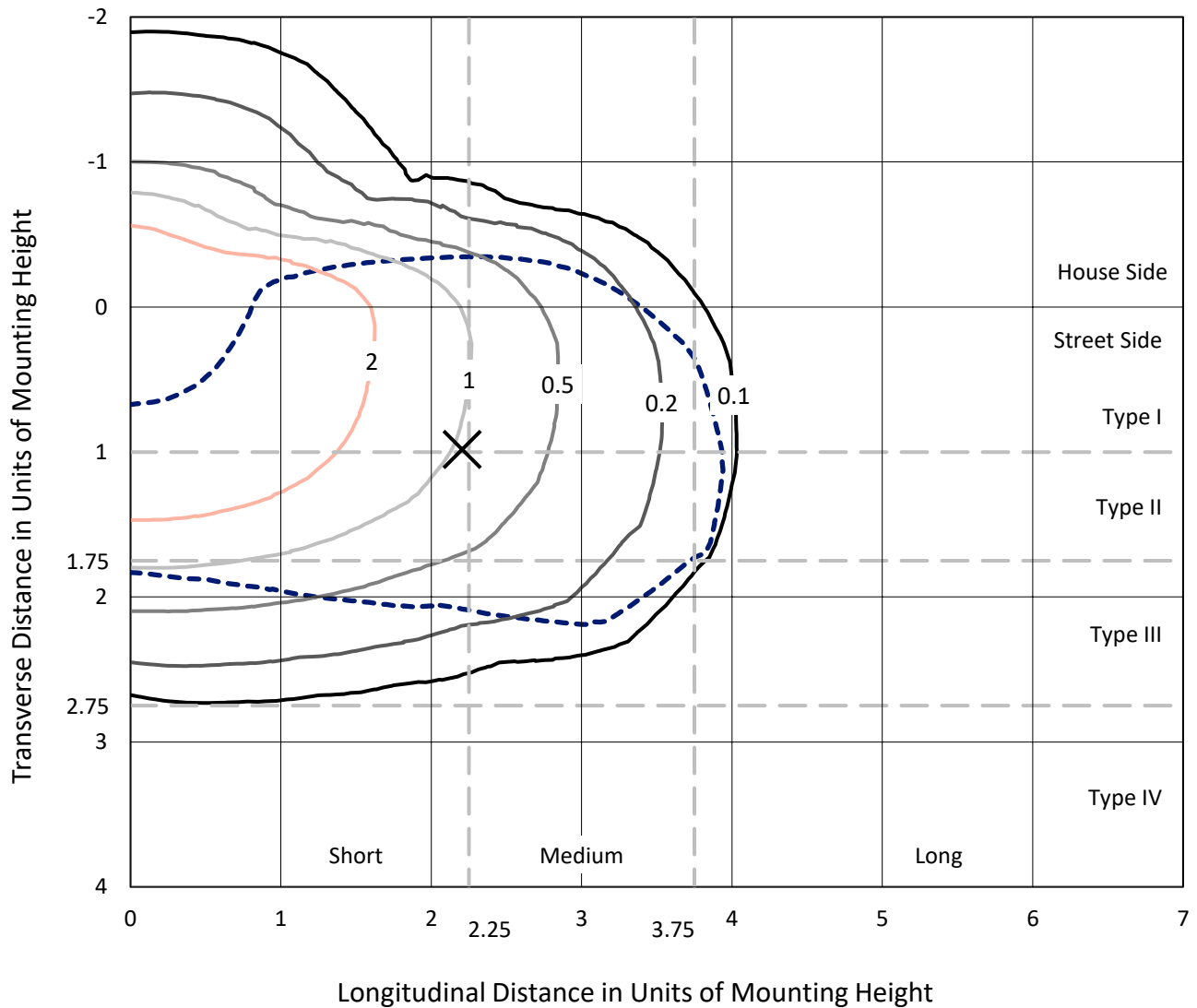
Lumens per Lamp: N/A  
Luminaire Lumens: 19669 lumens  
Efficiency: N/A  
Efficacy: 131.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 149.1  
Input Voltage (V): 120.0  
Input Current (Ain): 1.259  
Voltage Rise (V): NR  
Power Factor: 0.997  
Total Harmonic Distortion (THDi): 6.297  
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

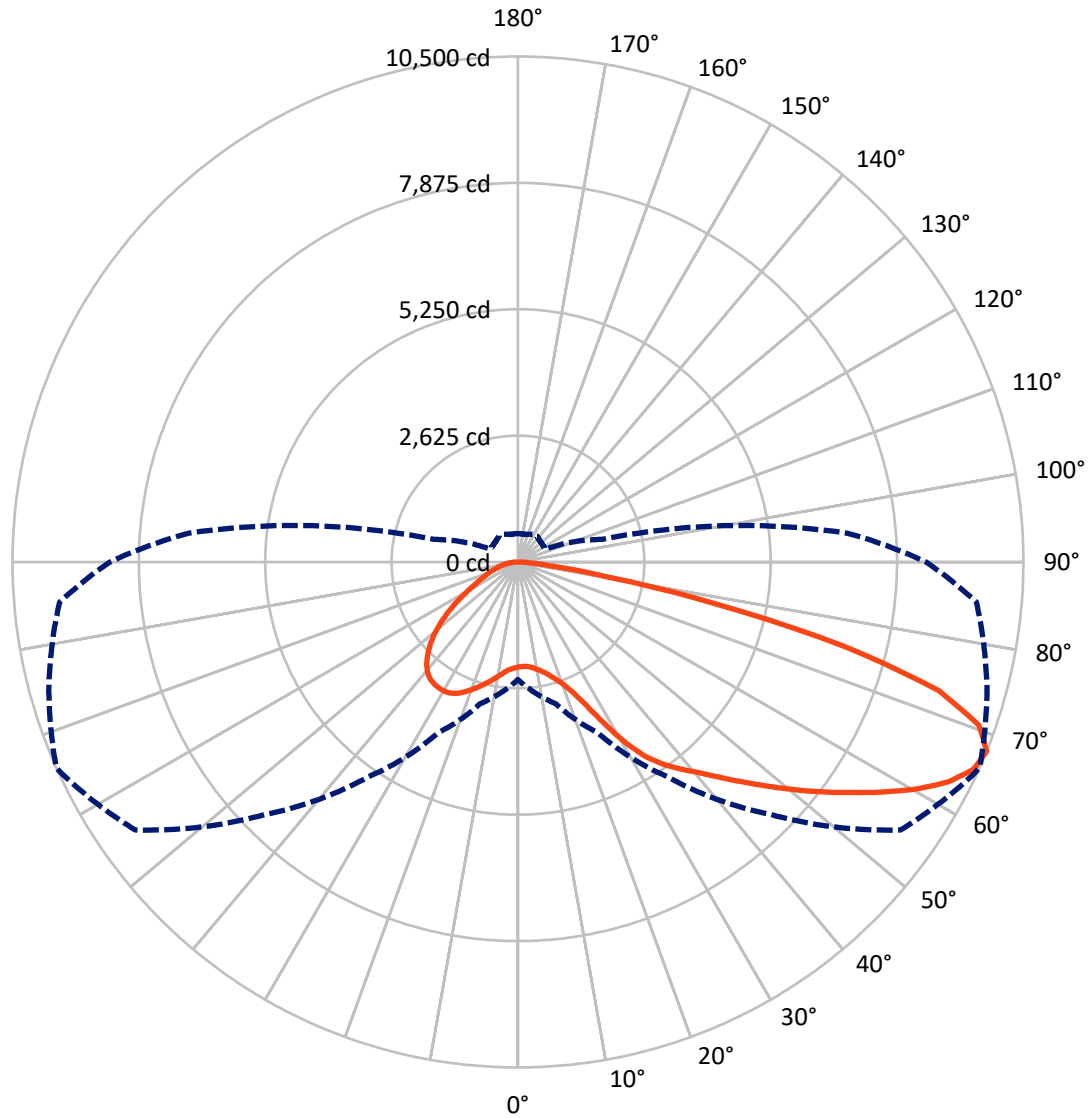
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4890.6	0.0	4890.6
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	14778.4	0.0	14778.4
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	19669.0	0.0	19669.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.3	1.1
10°-20°	714.6	3.6
20°-30°	1377.4	7.0
30°-40°	2415.0	12.3
40°-50°	3590.3	18.3
50°-60°	4551.1	23.1
60°-70°	4453.1	22.6
70°-80°	2124.2	10.8
80°-90°	227.0	1.2
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°	19669.0	100.0
0°-180°	19669.0	100.0

**Coefficient of Utilization**



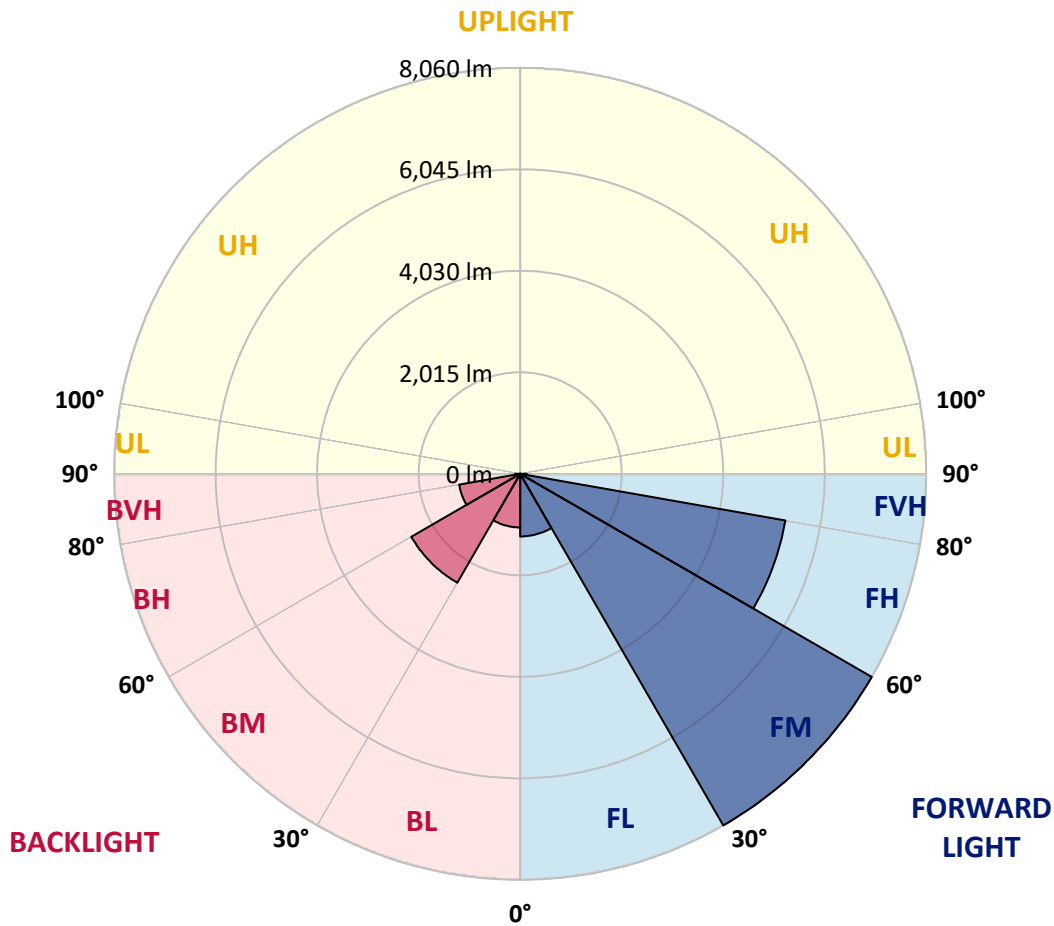
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1242.9	6.3			
FM (30°-60°)	8060.2	41.0			
FH (60°-80°)	5346.6	27.2			G3/7500
FVH (80°-90°)	128.7	0.7			G2/225
BL (0°-30°)	1065.4	5.4	B3/2500		
BM (30°-60°)	2496.2	12.7	B2/2500		
BH (60°-80°)	1230.7	6.3	B3/2500		G3/2500
BVH (80°-90°)	98.3	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2181.6	2181.6	2181.6	2181.6	2181.6	2181.6	2181.6	2181.6	2181.6	2181.6	2181.6
2.5°	2158.8	2171.2	2168.1	2163.0	2161.9	2164.0	2167.1	2170.2	2169.2	2174.3	2182.6
5°	2152.6	2165.0	2164.0	2164.0	2168.1	2176.4	2181.6	2186.7	2181.6	2187.8	2199.1
7.5°	2156.7	2166.1	2170.2	2174.3	2184.7	2200.2	2212.6	2223.9	2217.7	2225.0	2239.4
10°	2209.5	2216.7	2220.8	2220.8	2228.1	2245.6	2258.0	2278.7	2273.5	2284.9	2303.5
12.5°	2305.6	2312.8	2312.8	2308.7	2313.8	2325.2	2329.3	2352.1	2342.8	2361.4	2380.0
15°	2423.4	2437.8	2426.5	2419.2	2421.3	2432.7	2431.6	2449.2	2439.9	2455.4	2471.9
17.5°	2553.6	2572.2	2553.6	2552.6	2548.4	2560.8	2561.9	2577.4	2560.8	2572.2	2583.6
20°	2707.6	2733.4	2717.9	2723.1	2713.8	2718.9	2724.1	2746.8	2721.0	2729.3	2726.2
22.5°	2924.6	2955.6	2939.0	2958.7	2952.5	2948.4	2947.3	2987.6	2947.3	2950.4	2920.4
25°	3240.8	3278.0	3249.1	3275.9	3275.9	3289.4	3304.9	3356.6	3289.4	3269.7	3192.2
27.5°	3707.9	3745.1	3688.3	3704.8	3699.6	3732.7	3716.2	3844.3	3772.0	3740.0	3583.9
30°	4270.1	4336.2	4228.8	4224.6	4219.5	4272.2	4295.9	4380.7	4307.3	4275.3	4087.2
32.5°	4877.7	4947.0	4818.8	4781.6	4762.0	4794.0	4774.4	4842.6	4792.0	4742.4	4509.8
35°	5520.5	5588.7	5466.8	5394.5	5315.9	5248.7	5178.5	5196.0	5148.5	5073.1	4832.3
37.5°	6128.2	6253.2	6124.1	6046.5	5901.9	5770.6	5574.3	5492.6	5448.2	5379.0	5136.1
40°	6747.2	6818.5	6720.3	6654.2	6497.1	6291.5	5977.3	5804.7	5744.8	5677.6	5472.0
42.5°	7202.9	7271.2	7218.4	7173.0	7050.0	6811.3	6405.1	6189.2	6102.4	6026.9	5852.3
45°	7564.6	7615.3	7582.2	7598.7	7546.0	7314.6	6848.5	6601.5	6511.6	6419.6	6282.2
47.5°	7710.4	7764.1	7816.8	7915.0	8004.9	7834.4	7324.9	7047.9	6952.9	6858.8	6723.4
50°	7693.8	7748.6	7901.5	8110.3	8389.3	8332.5	7827.1	7523.3	7435.5	7328.0	7202.9
52.5°	7561.5	7623.5	7819.9	8167.1	8611.5	8705.5	8338.7	8014.2	7931.5	7803.4	7678.3
55°	7214.3	7251.5	7546.0	8037.9	8664.2	8966.0	8839.9	8537.1	8454.4	8275.6	8139.2
57.5°	6570.5	6624.2	7053.1	7689.7	8531.9	9142.7	9280.1	9086.9	9007.3	8750.0	8607.4
60°	5730.3	5816.1	6307.0	7104.8	8195.0	9141.6	9680.1	9627.4	9561.2	9217.1	9068.3
62.5°	4779.6	4878.8	5351.1	6278.0	7606.0	8882.3	9930.1	10080.0	10045.9	9648.0	9457.9
65°	3670.7	3738.9	4209.1	5208.4	6689.3	8325.2	9959.1	10389.0	10395.2	9975.6	9661.5
67.5°	2444.0	2640.4	3048.6	3908.4	5461.6	7414.8	9704.9	10439.6	10499.6	10088.3	9559.1
70°	1192.6	1450.9	1850.9	2540.1	3908.4	6018.6	9040.4	10024.2	10157.5	9759.6	8949.4
72.5°	495.0	578.7	796.8	1253.5	2243.6	4061.3	7705.2	8897.8	9144.7	8647.7	7524.3
75°	333.8	361.7	455.7	642.8	1022.1	2002.8	5556.7	6634.6	7032.4	6531.2	5338.7
77.5°	257.3	274.9	331.7	449.5	607.7	757.5	2974.2	3998.3	4204.0	3891.9	2777.8
80°	202.6	216.0	248.0	327.6	430.9	405.1	1013.8	1811.6	1930.4	1619.4	892.9
82.5°	175.7	180.8	177.7	222.2	286.3	236.7	332.8	668.6	737.9	535.3	291.4
85°	127.1	141.6	147.8	137.4	151.9	119.9	136.4	236.7	260.4	232.5	164.3
87.5°	51.7	76.5	94.0	88.9	55.8	34.1	42.4	69.2	79.6	86.8	53.7
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°	2181.6	2181.6	2181.6	2181.6	2181.6	2181.6	2181.6	2181.6	2181.6	2181.6	2181.6
2.5°	2183.6	2190.9	2196.0	2202.2	2206.4	2212.6	2225.0	2232.2	2233.2	2238.4	2237.4
5°	2203.3	2213.6	2225.0	2241.5	2260.1	2275.6	2299.4	2315.9	2322.1	2327.3	2326.2
7.5°	2245.6	2260.1	2280.8	2309.7	2336.6	2357.2	2386.2	2405.8	2425.4	2432.7	2433.7
10°	2308.7	2329.3	2359.3	2398.6	2427.5	2454.4	2484.3	2500.9	2520.5	2528.8	2532.9
12.5°	2387.2	2408.9	2448.2	2502.9	2529.8	2548.4	2558.8	2554.6	2558.8	2566.0	2568.1
15°	2477.1	2500.9	2545.3	2604.2	2622.8	2606.3	2583.6	2562.9	2559.8	2561.9	2569.1
17.5°	2583.6	2601.1	2652.8	2702.4	2689.0	2620.8	2571.2	2538.1	2521.5	2516.4	2523.6
20°	2732.4	2732.4	2774.7	2805.7	2715.8	2600.1	2522.6	2468.8	2434.7	2420.3	2417.2
22.5°	2913.2	2896.7	2923.5	2901.8	2710.7	2542.2	2434.7	2341.7	2290.1	2269.4	2266.3
25°	3142.6	3123.0	3115.8	2981.4	2673.5	2450.2	2275.6	2163.0	2117.5	2106.1	2108.2
27.5°	3488.8	3439.2	3345.2	3024.8	2605.3	2305.6	2089.6	1985.2	1959.4	1960.4	1963.5
30°	3949.7	3850.5	3620.1	3032.1	2493.6	2100.9	1899.4	1825.0	1812.6	1817.8	1835.4
32.5°	4376.5	4282.5	3901.2	2999.0	2322.1	1900.5	1728.9	1679.3	1660.7	1666.9	1675.2
35°	4711.4	4685.5	4161.6	2952.5	2111.3	1712.4	1576.0	1533.6	1497.4	1489.2	1495.4
37.5°	5027.6	5017.3	4356.9	2887.4	1902.5	1579.1	1453.0	1397.2	1344.5	1315.5	1316.6
40°	5374.8	5364.5	4485.0	2787.1	1717.5	1463.3	1342.4	1269.0	1203.9	1151.2	1156.4
42.5°	5765.5	5704.5	4546.0	2643.5	1560.5	1365.1	1252.5	1153.3	1067.5	1019.0	1022.1
45°	6192.3	6054.8	4545.0	2460.6	1428.2	1275.2	1156.4	1015.9	936.3	890.8	888.7
47.5°	6644.9	6389.6	4489.2	2258.0	1300.0	1176.0	1007.6	900.1	847.4	819.5	813.3
50°	7112.0	6702.8	4394.1	2025.5	1168.8	1063.4	914.6	841.2	800.9	775.1	765.8
52.5°	7551.2	6987.0	4279.4	1762.0	1035.5	953.8	873.2	816.4	774.0	745.1	732.7
55°	7959.4	7231.9	4117.1	1492.3	927.0	880.5	853.6	806.1	757.5	723.4	710.0
57.5°	8322.1	7391.0	3837.1	1239.1	849.5	829.8	832.9	788.5	732.7	703.8	685.2
60°	8623.9	7507.8	3422.7	1004.5	786.4	780.2	800.9	755.4	690.3	657.3	642.8
62.5°	8804.7	7505.7	2914.2	822.6	732.7	734.8	758.5	714.1	648.0	617.0	607.7
65°	8789.2	7321.8	2356.2	703.8	681.0	683.1	714.1	668.6	612.8	594.2	593.2
67.5°	8478.2	6873.3	1807.5	626.3	624.2	633.5	669.7	637.6	591.1	589.1	592.2
70°	7635.9	5942.2	1302.1	564.2	565.3	578.7	626.3	618.0	579.7	583.9	582.8
72.5°	6123.0	4530.5	874.3	499.1	500.2	521.9	584.9	602.5	568.4	623.2	631.4
75°	4077.9	2825.4	562.2	429.9	430.9	458.8	548.7	572.5	537.4	621.1	626.3
77.5°	1959.4	1270.1	407.2	361.7	361.7	387.5	474.3	512.6	457.8	482.6	442.3
80°	676.9	477.4	320.4	291.4	285.2	302.8	399.9	444.4	394.8	363.8	341.0
82.5°	266.6	248.0	257.3	226.3	205.7	217.0	311.1	366.9	290.4	262.5	261.5
85°	152.9	161.2	181.9	149.8	118.8	133.3	228.4	263.5	219.1	193.2	197.4
87.5°	41.3	56.8	83.7	77.5	53.7	56.8	108.5	145.7	126.1	97.1	100.2
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)