

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: McGRAW-EDISON

Report Number: P833692

Luminaire Tested: **TTN-D2-830-U-WQ-CG-UPL1**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833692
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TTN-D2-830-U-WQ-CG-UPL1
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND WIDE DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4793.9 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U3 - G1

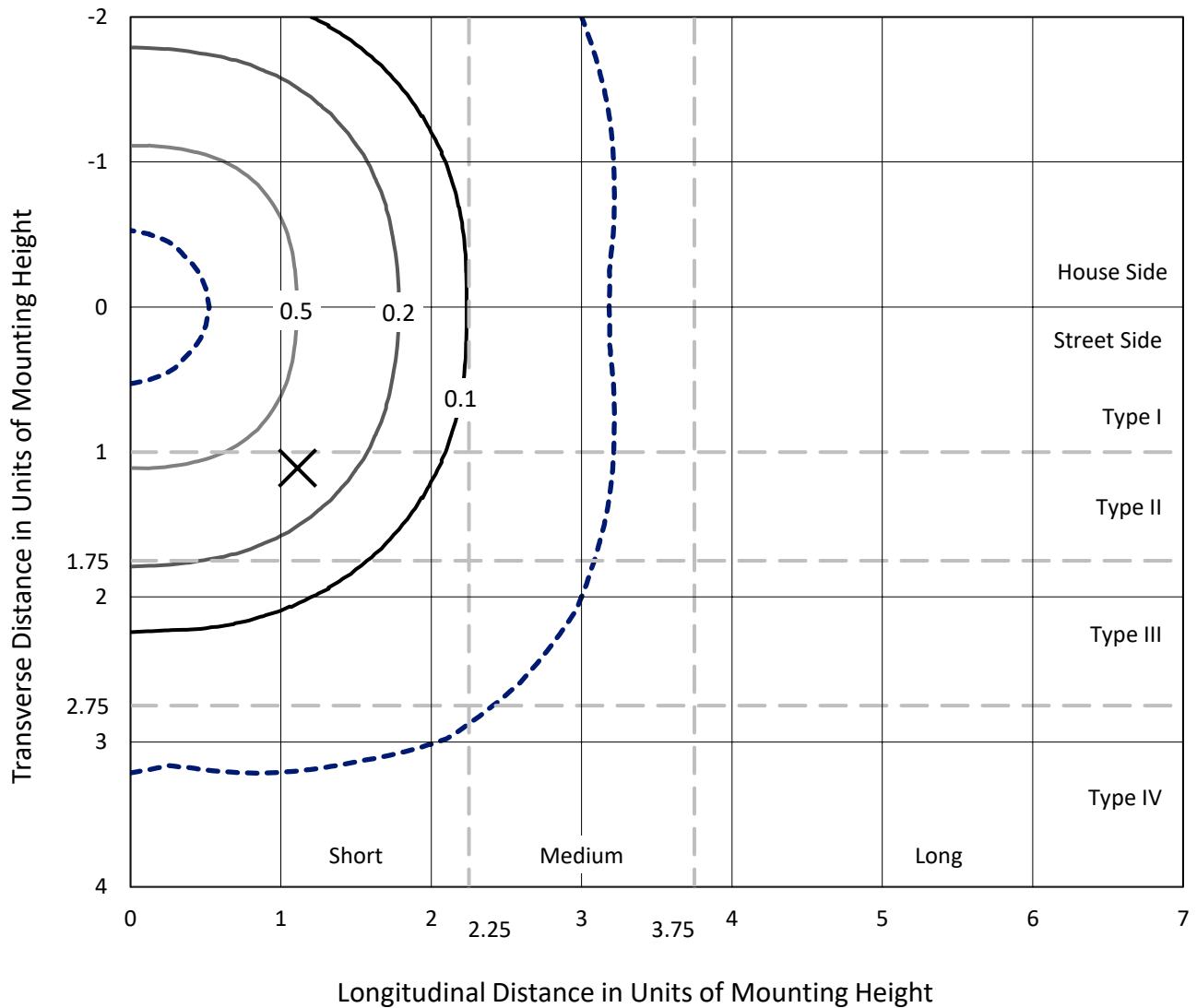
Input Watts (W): 45.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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 CATALOG NUMBER: TTN-D2-830-U-WQ-CG-UPL1

Iso-Footcandle Lines of Horizontal Illumination

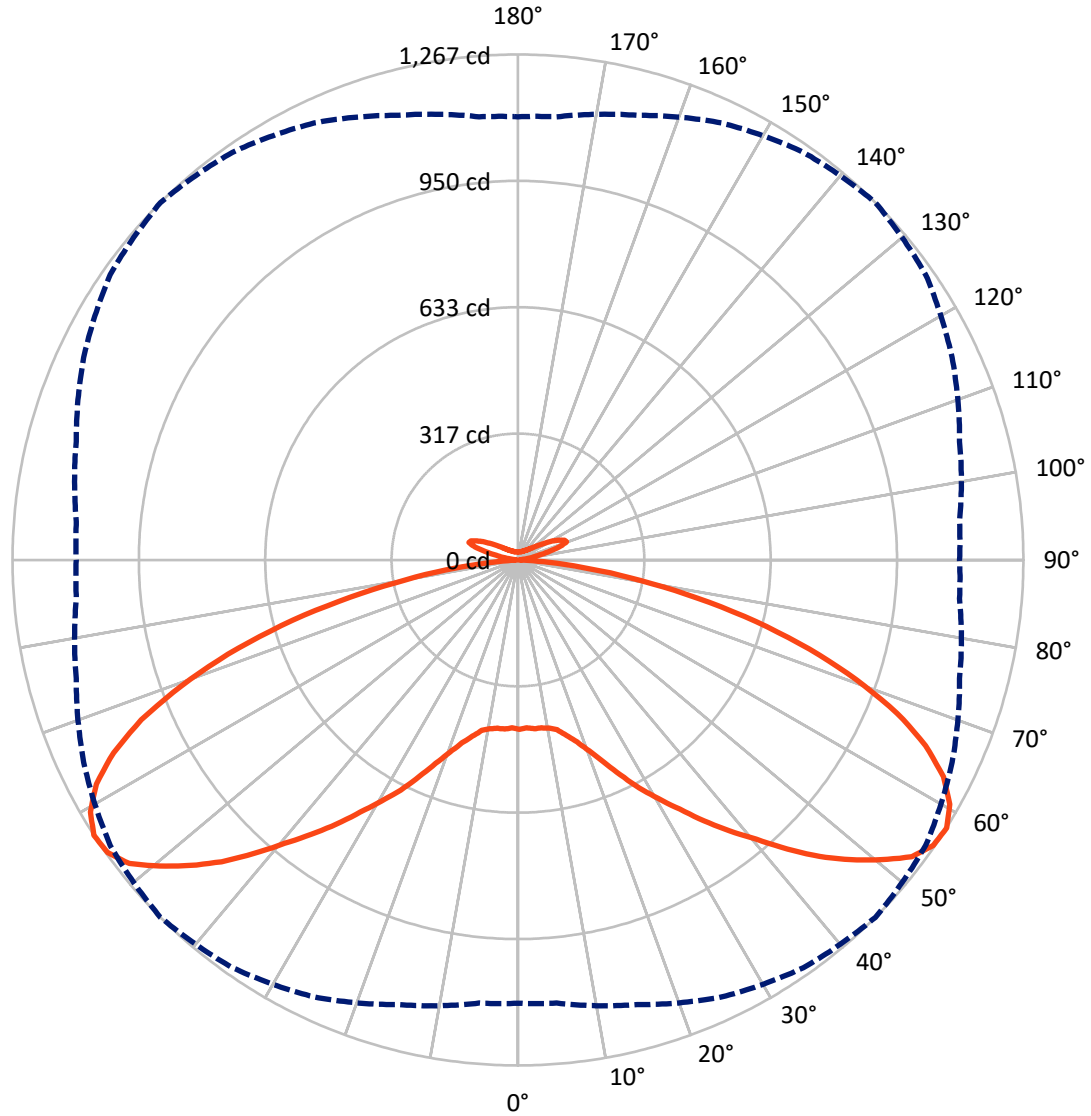
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 fc
 Type V - Short - N/A

REPORT NUMBER: P833692
CATALOG NUMBER: TTN-D2-830-U-WQ-CG-UPL1

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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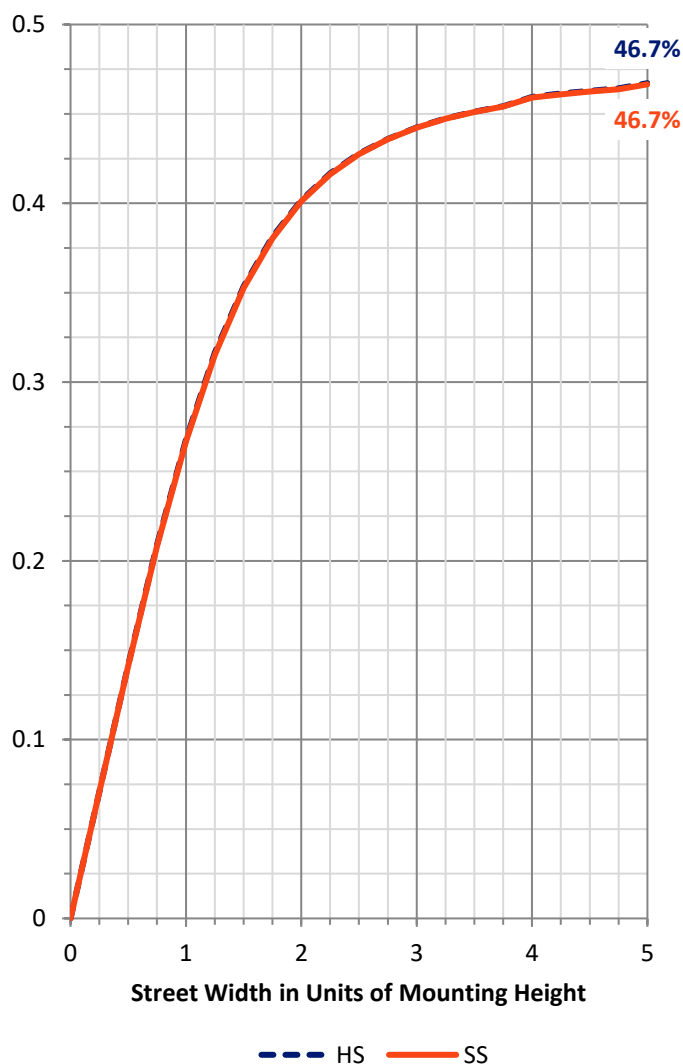
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2249.2	147.7	2396.9
	% Fixture	46.9	3.1	50.0
Street Side	Lumens	2249.2	147.7	2396.9
	% Fixture	46.9	3.1	50.0
Total	Lumens	4498.4	295.5	4793.9
	% Fixture	93.8	6.2	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.5	0.8
10°-20°	131.0	2.7
20°-30°	275.6	5.7
30°-40°	496.9	10.4
40°-50°	789.9	16.5
50°-60°	1053.9	22.0
60°-70°	1018.3	21.2
70°-80°	590.1	12.3
80°-90°	102.1	2.1
90°-100°	6.6	0.1
100°-110°	67.0	1.4
110°-120°	98.0	2.0
120°-130°	56.9	1.2
130°-140°	30.1	0.6
140°-150°	17.9	0.4
150°-160°	11.0	0.2
160°-170°	6.0	0.1
170°-180°	2.0	0.0
0°-90°	4498.4	93.8
0°-180°	4793.9	100.0

Coefficient of Utilization

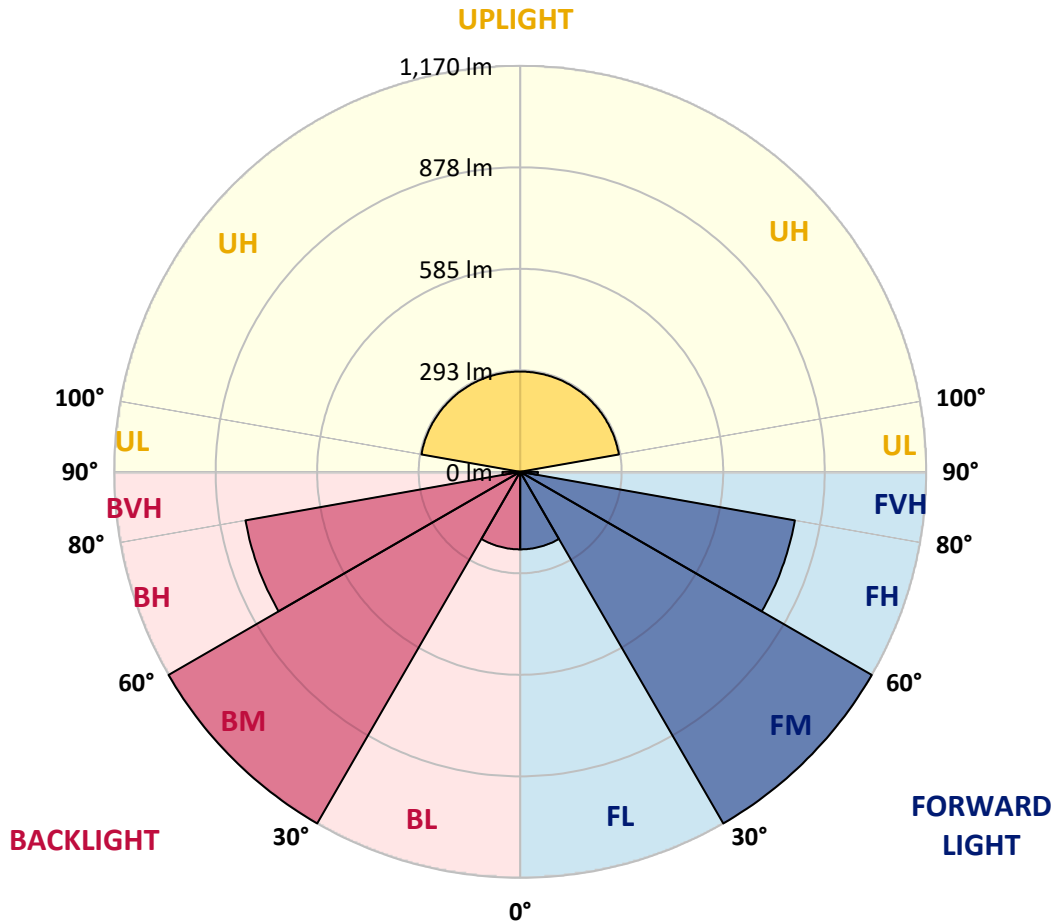


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	223.6	4.7			
FM (30°-60°)	1170.4	24.4			
FH (60°-80°)	804.2	16.8			G1/1800
FVH (80°-90°)	51.0	1.1			G1/100
BL (0°-30°)	223.6	4.7	B1/500		
BM (30°-60°)	1170.4	24.4	B2/2500		
BH (60°-80°)	804.2	16.8	B2/1000		G1/1800
BVH (80°-90°)	51.0	1.1			G1/100
UL (90°-100°)	6.6	0.1		U1/10	
UH (100°-180°)	288.9	6.0		U3/500	

BUG Rating: B2-U3-G1
 Type V Short





REPORT NUMBER: P833692

CATALOG NUMBER: TTN-D2-830-U-WQ-CG-UPL1

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9
2.5°	421.0	421.0	421.0	421.0	421.0	421.0	421.0	421.0	421.0	421.0	421.0
5°	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9
7.5°	421.0	421.0	424.9	424.9	424.9	424.9	424.9	424.9	424.9	421.0	421.0
10°	424.9	424.9	424.9	428.8	428.8	428.8	428.8	428.8	424.9	424.9	424.9
12.5°	432.7	432.7	436.6	436.6	436.6	436.6	436.6	436.6	436.6	432.7	432.7
15°	452.2	452.2	452.2	456.1	456.1	456.1	456.1	456.1	452.2	452.2	452.2
17.5°	471.7	471.7	475.6	475.6	479.5	479.5	479.5	475.6	475.6	475.6	475.6
20°	499.0	499.0	502.9	502.9	506.8	510.7	510.7	506.8	502.9	502.9	502.9
22.5°	534.1	538.0	538.0	538.0	541.9	549.7	545.8	541.9	538.0	538.0	538.0
25°	576.9	580.8	584.7	584.7	588.6	596.4	596.4	584.7	584.7	584.7	584.7
27.5°	627.6	631.5	635.4	635.4	639.3	647.1	643.2	635.4	635.4	631.5	631.5
30°	674.4	678.3	682.2	686.1	690.0	693.9	693.9	686.1	682.2	678.3	674.4
32.5°	721.2	721.2	729.0	736.8	744.6	744.6	748.5	736.8	729.0	721.2	717.3
35°	768.0	771.9	775.8	787.5	799.1	803.0	799.1	787.5	775.8	768.0	768.0
37.5°	818.6	822.5	826.4	842.0	853.7	861.5	853.7	842.0	826.4	818.6	814.7
40°	873.2	877.1	881.0	900.5	912.2	920.0	908.3	896.6	881.0	873.2	869.3
42.5°	923.9	931.7	939.5	962.9	982.4	990.2	978.5	959.0	943.4	923.9	920.0
45°	986.3	994.1	1005.8	1029.1	1048.6	1060.3	1044.7	1025.3	1001.9	986.3	982.4
47.5°	1036.9	1044.7	1056.4	1087.6	1114.9	1122.7	1107.1	1083.7	1052.5	1033.0	1029.1
50°	1075.9	1083.7	1107.1	1142.2	1173.4	1181.2	1165.6	1134.4	1099.3	1072.0	1068.1
52.5°	1107.1	1114.9	1142.2	1189.0	1224.1	1235.8	1216.3	1181.2	1134.4	1103.2	1099.3
55°	1122.7	1126.6	1161.7	1212.4	1247.5	1263.0	1243.6	1204.6	1153.9	1118.8	1114.9
57.5°	1111.0	1114.9	1153.9	1208.5	1247.5	1266.9	1247.5	1200.7	1146.1	1111.0	1107.1
60°	1087.6	1087.6	1122.7	1185.1	1231.9	1243.6	1224.1	1177.3	1118.8	1083.7	1079.8
62.5°	1044.7	1040.8	1083.7	1138.3	1185.1	1196.8	1181.2	1134.4	1075.9	1040.8	1036.9
65°	962.9	955.1	1017.5	1068.1	1111.0	1122.7	1111.0	1068.1	1013.6	959.0	951.2
67.5°	865.4	853.7	912.2	970.7	1009.7	1025.3	1009.7	974.6	912.2	857.6	853.7
70°	764.1	752.4	799.1	849.8	892.7	900.5	884.9	849.8	791.4	756.3	756.3
72.5°	643.2	631.5	674.4	713.4	756.3	764.1	748.5	717.3	674.4	639.3	635.4
75°	510.7	499.0	538.0	569.2	612.0	615.9	608.1	573.0	538.0	502.9	502.9
77.5°	378.1	366.4	397.6	424.9	460.0	460.0	456.1	428.8	397.6	374.2	374.2
80°	249.5	241.7	269.0	280.7	311.9	311.9	308.0	288.5	265.1	249.5	245.6
82.5°	140.3	132.5	155.9	159.8	183.2	183.2	179.3	163.7	148.1	136.4	136.4
85°	54.6	46.8	62.4	66.3	78.0	78.0	74.1	70.2	58.5	50.7	50.7
87.5°	3.9	3.9	7.8	7.8	11.7	11.7	11.7	7.8	7.8	3.9	3.9
90°	2.5	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.5	2.5
92.5°	2.5	2.5	2.5	3.5	4.0	3.5	4.0	3.0	3.0	2.5	2.5
95°	3.0	3.0	3.5	4.5	5.6	6.1	6.1	3.5	3.5	3.0	3.0
97.5°	4.0	4.5	4.5	5.6	9.1	16.7	10.1	5.1	5.1	4.5	4.0
100°	6.6	7.1	7.1	12.6	26.8	35.9	25.8	13.1	9.6	7.1	7.1
102.5°	21.2	22.2	27.3	40.9	60.7	55.1	46.5	44.0	30.3	24.3	23.3
105°	54.1	53.6	57.6	68.2	84.9	83.4	76.8	69.8	60.2	55.6	55.6
107.5°	71.3	71.3	74.8	83.9	96.6	112.7	114.2	90.5	79.4	74.3	73.8
110°	80.4	80.4	83.4	91.0	107.7	130.4	129.4	111.7	98.1	91.5	90.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	82.4	82.9	86.9	98.6	116.8	126.9	122.3	115.3	109.2	104.1	103.1
115°	85.4	85.4	90.0	101.1	111.2	115.3	110.2	104.6	100.6	98.6	99.6
117.5°	84.4	85.9	86.9	93.0	99.6	102.6	100.1	92.5	89.5	88.5	86.9
120°	78.4	78.4	79.4	82.4	85.9	87.5	86.4	81.4	78.9	78.4	77.3
122.5°	69.8	70.3	69.8	71.3	73.8	75.3	74.3	70.3	69.3	69.3	68.2
125°	61.2	61.2	60.7	61.7	63.2	62.7	63.2	61.2	60.7	60.7	60.2
127.5°	55.1	54.6	53.6	54.1	54.6	54.6	55.1	53.1	53.6	54.1	53.6
130°	49.0	49.0	48.0	48.0	48.0	47.0	48.0	47.0	47.5	48.0	48.5
132.5°	43.5	43.5	42.0	41.5	41.5	41.5	42.0	41.5	42.5	43.5	43.5
135°	38.9	38.9	37.4	37.9	37.9	37.4	37.9	37.4	38.4	38.9	38.9
137.5°	35.4	35.4	34.4	34.4	34.4	33.9	34.4	34.4	34.9	35.9	36.4
140°	32.4	32.4	31.8	31.8	31.3	31.8	31.8	31.8	32.4	32.9	32.9
142.5°	30.8	30.3	29.8	29.3	29.8	29.8	29.8	29.3	29.8	30.8	30.8
145°	28.3	28.3	27.8	27.8	27.8	28.3	27.8	27.8	28.3	28.3	28.8
147.5°	26.8	26.8	26.3	26.8	26.8	26.8	26.8	26.3	26.8	26.8	27.3
150°	26.3	25.8	25.3	25.8	25.8	25.3	25.3	25.3	25.3	25.8	25.8
152.5°	24.8	24.8	24.3	24.8	24.3	24.3	24.3	24.3	24.3	24.8	25.3
155°	23.8	23.8	23.3	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
157.5°	22.7	23.3	22.7	22.7	22.7	22.7	22.7	22.7	22.7	23.3	23.3
160°	22.2	22.2	22.2	22.2	21.7	21.7	21.7	22.2	22.2	22.2	22.7
162.5°	21.7	21.7	21.7	21.7	21.2	21.2	21.2	21.2	21.7	21.7	22.2
165°	21.7	21.2	21.2	21.2	20.7	20.7	20.7	20.7	21.2	21.7	21.2
167.5°	20.7	20.7	20.7	20.7	20.7	20.2	20.2	20.7	20.7	20.7	21.2
170°	20.7	20.7	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.7
172.5°	20.7	20.7	20.7	20.7	20.2	20.2	20.2	20.2	20.2	20.7	20.7
175°	20.7	20.7	20.7	20.7	20.2	20.2	20.2	20.7	20.7	20.7	20.2
177.5°	20.7	20.7	20.7	20.7	20.2	20.7	20.7	20.7	20.7	20.7	20.7
180°	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7

(END OF REPORT)